

A corpus investigation of two non-standard features, in English as a lingua franca, native speech, and learner language.

*The 3<sup>rd</sup> person zero, and interchange of the relative pronouns who/which.*

Barry Kavanagh



Master's thesis, ILOS

UNIVERSITY OF OSLO

15 May 2014



A corpus investigation of two non-standard features, in English as a lingua franca, native speech, and learner language: the 3<sup>rd</sup> person zero, and interchange of the relative pronouns *who/which*.

© Barry Kavanagh

2014

A corpus investigation of two non-standard features, in English as a lingua franca, native speech, and learner language: the 3<sup>rd</sup> person zero, and interchange of the relative pronouns *who/which*.

Barry Kavanagh

<http://www.duo.uio.no/>

Printed by: Reprosentralen, University of Oslo

# Abstract

Using English as a lingua franca is different from using it as a foreign language for communication with native speakers. English as a lingua franca (ELF) can be defined as *the use of English among communicators of different first languages (including English itself), for whom English is the communicative medium of choice, and often the only option* – a definition based on that of Seidlhofer (2011).

There are non-standard features of English that are viewed as errors from a foreign language point of view, but could be viewed neutrally from an ELF perspective if they do not interfere with communicative effectiveness, or if they are a manifestation of the group identity of the speaker. This thesis follows up claims that there are non-standard features of English shared by ELF events, and at frequencies that would make ELF distinct from native speaker English and English used by advanced learners. Two such features are examined, both of which have been named by Seidlhofer (2004) as not being obstacles to communicative effectiveness: the absence of the third person singular present tense *-s* ending (called here the 3<sup>rd</sup> person zero), and the interchange of the relative pronouns *who* and *which*.

A dataset many times larger than those used in previous studies was examined: two spoken ELF corpora of over a million words each, the Vienna-Oxford International Corpus of English (VOICE) and the English as a Lingua Franca in Academic settings (ELFA) corpus. The non-standard features were also investigated in a native speaker corpus, the British National Corpus (BNC), and in a spoken corpus of higher intermediate to advanced learners of English as a foreign language, the Louvain International Database of Spoken English Interlanguage (LINDSEI). Both ELFA and LINDSEI were tagged for this study using CLAWS7, and there is some advice for researchers on using this tool within. The two non-standard features were examined in the corpora for frequency of occurrence, and by factors that might influence the frequencies of any non-standard features found: L1 (first language), event type (function or form of an event), and domain (setting where a certain kind of speech may be appropriate).

The non-standard features investigated are present in the four corpora, albeit in low percentages. Standard usage is preferred by speakers in all corpora. For the two ELF corpora, this means

neither of the non-standard features can be claimed as an ‘emergent trend’ or a ‘default option’ for ELF. The non-standard features appear in VOICE and ELFA at a lower rate than that of LINDSEI, but not by much. The BNC generally has fewer of the two non-standard features than the other corpora, but not in the case of the 3<sup>rd</sup> person zero in two event types.

The non-standard features were recorded in the speech of many different L1s, and were sorted into L1 groups for analysis. In both ELF corpora and LINDSEI, for both non-standard features, Romance L1s have a consistently higher level of non-standard features than Germanic L1s. The data suggests that L1 makes a difference. The higher percentage for the 3<sup>rd</sup> person zero in LINDSEI can be mitigated by the removal of two particular groups of speakers, Chinese and Japanese L1s; without these speakers the percentage is just a little higher than that of VOICE.

There are differences between event types in the ELF corpora, but they point in different directions: the higher percentages of non-standard features can appear in both formal and informal event types, so no conclusions can be drawn about them. The 3<sup>rd</sup> person zero appears considerably more often in the BNC in two event types (‘interview’ and ‘conversation’), which hints that what is truly ‘standard’ in native speech might be contextually dependent. The event type of LINDSEI (‘interview’) does not seem to be the factor that influences its frequencies.

Differences between domains were shown, but no domain was prominent in any of the corpora. The all-educational domain corpora, ELFA and LINDSEI, did not form a pattern with the domains labelled Educational in VOICE and the BNC.

This investigation also examined the claim that ELF speakers choose the relative pronoun *which* more often than *who* when there is a choice between them and either use would be considered standard. This was shown to be the case – marginally – in the present data, but it was also true for LINDSEI, which shows a similarity between the use of ELF and learner language in this regard, rather than something special about ELF.

No investigation of the language in ELF changes anything about the ELF perspective, which is a way at looking at the language. One can imagine that English will continue to be spoken in, for example, a professional business context, in which the speakers do not consider themselves to be learners, and do not consider native-like speech to be the target for competence.

# Acknowledgements

I would like to thank my supervisor Johan Elsness for all his help on this, especially for helping me clarify my thinking.

Thank you to all the people who answered queries I had.

Thank you to all the people who lent me things.





# Table of contents

|  |    |
|--|----|
| Chapter 1. Introduction  | 1  |
| 1.1. Candy animals   | 1  |
| 1.2. The thesis topic: two non-standard features of English, in English as a lingua franca | 1  |
| 1.3. The research questions  | 2  |
| 1.4. An overview of the thesis   | 3  |
| Chapter 2. Theory  | 4  |
| 2.1. Defining ELF  | 4  |
| 2.2. Lingua franca   | 6  |
| 2.3. ELF in relation to pidgins and creoles  | 7  |
| 2.4. ELF domains and speakers  | 8  |
| 2.5. ELF in relation to international variety models of English                            | 10 |
| 2.6. ELF in relation to Kachru's circles model   | 10 |
| 2.7. Differences between ELF and EFL   | 11 |
| 2.8. ELF and learners of English   | 13 |
| 2.9. ELF and language change   | 14 |
| 2.10. Defining error   | 18 |
| 2.11. Non-standard features in ELF   | 19 |
| 2.12. Strategies in ELF  | 21 |
| 2.13. Spoken grammar and possible vernacular universals                                    | 22 |
| 2.14. Spoken grammatical data  | 24 |
| 2.15. Errors that are no obstacle to communicative success                                 | 25 |
| 2.16. The third person singular present tense -s ending                                    | 27 |
| 2.16.1. Introduction: -s and zero  | 27 |
| 2.16.2. Concord in some constructions  | 27 |
| 2.16.3. Other uses of the base form  | 29 |
| 2.16.4. The 3 <sup>rd</sup> person zero and ELF  | 30 |
| 2.17. The relative pronouns <i>who</i> and <i>which</i>                                    | 32 |
| 2.17.1. Relative pronouns  | 32 |
| 2.17.2 <i>Who</i> and <i>which</i> as relative pronouns                                    | 33 |
| 2.17.3. Collective nouns with relative pronouns  | 35 |
| 2.17.4. Some other uses of <i>who</i> and <i>which</i>                                     | 35 |
| 2.17.5 The relative pronouns <i>who</i> and <i>which</i> , and ELF                         | 36 |

|   |    |
|---|----|
| Chapter 3. Data and methods   | 38 |
| 3.1. Corpus linguistics   | 38 |
| 3.2. VOICE  | 38 |
| 3.2.1. General information about VOICE  | 38 |
| 3.2.2. Obtaining L1s from VOICE   | 39 |
| 3.2.3. Event types in VOICE   | 39 |
| 3.2.4. Domains in VOICE   | 40 |
| 3.3. ELFA   | 40 |
| 3.3.1. General information about ELFA   | 40 |
| 3.3.2. Obtaining L1s in ELFA  | 41 |
| 3.3.3. Event types in ELFA  | 41 |
| 3.4. The BNC  | 41 |
| 3.4.1. Native speaker (NS) baseline data  | 41 |
| 3.4.2. General information about the BNC  | 42 |
| 3.4.3. Event types, domains, and regions in the BNC                               | 42 |
| 3.5. LINDSEI  | 43 |
| 3.5.1. General information about LINDSEI  | 43 |
| 3.5.2. A and B turns in LINDSEI   | 44 |
| 3.5.3. L1s in LINDSEI   | 44 |
| 3.6. WordSmith 6 concordancer   | 45 |
| 3.7. The CLAWS7 tagger  | 46 |
| 3.8. Self-correction in spoken data   | 47 |
| Chapter 4. Corpus investigation of the 3 <sup>rd</sup> person zero                | 49 |
| 4.1. Introduction   | 49 |
| 4.1.1. Verbs that were included   | 49 |
| 4.1.2. Data that were excluded for not being 3 <sup>rd</sup> person zeroes        | 50 |
| 4.2. The ELF corpora, VOICE and ELFA  | 51 |
| 4.2.1. The 3 <sup>rd</sup> person zero in VOICE                                   | 51 |
| 4.2.2. The 3 <sup>rd</sup> person zero in ELFA                                    | 53 |
| 4.2.3. The 3 <sup>rd</sup> person zero in VOICE and ELFA                          | 55 |
| 4.2.4. The 3 <sup>rd</sup> person zero in VOICE and ELFA, by L1                   | 56 |
| 4.2.5. Third person singular present tense forms in VOICE and ELFA, by event type | 64 |
| 4.2.6. Third person singular present tense forms in VOICE and ELFA, by domain     | 67 |

|  |     |
|--|-----|
| 4.3. The NS English corpus, the BNC  | 70  |
| 4.3.1. The 3 <sup>rd</sup> person zero in the BNC Spoken Components                                    | 70  |
| 4.3.2. Third person singular present tense forms in the BNC Spoken components,<br>by L1 and event type | 73  |
| 4.3.3. Third person singular present tense forms in the BNC Spoken components,<br>by domain            | 79  |
| 4.3.4. The BNC Written component   | 80  |
| 4.4. The learner language corpus, LINDSEI  | 82  |
| 4.4.1. The 3 <sup>rd</sup> person zero in LINDSEI  | 82  |
| 4.4.2. The 3 <sup>rd</sup> person zero in LINDSEI, by L1   | 85  |
| 4.4.3. The 3 <sup>rd</sup> person zero in LINDSEI, by event type and domain                            | 88  |
| Chapter 5. Corpus investigation of the relative pronouns <i>who</i> and <i>which</i>                   | 90  |
| 5.1. Introduction  | 90  |
| 5.1.1. Data that was included  | 90  |
| 5.1.2. Data that was excluded  | 91  |
| 5.1.3. Standard usage  | 92  |
| 5.1.4. Non-standard usage  | 93  |
| 5.2. The ELF corpora, VOICE and ELFA   | 93  |
| 5.2.1. <i>Who</i> and <i>which</i> in VOICE  | 93  |
| 5.2.2. <i>Who</i> and <i>which</i> in ELFA   | 95  |
| 5.2.3. Non-standard <i>who</i> and <i>which</i> in VOICE and ELFA, by L1                               | 97  |
| 5.2.4. <i>Who</i> and <i>which</i> in VOICE and ELFA, by event type                                    | 102 |
| 5.2.5. <i>Who</i> and <i>which</i> in VOICE and ELFA, by domain  | 104 |
| 5.3. The NS English corpus, the BNC  | 105 |
| 5.3.1. <i>Who</i> and <i>which</i> in the BNC Spoken components  | 105 |
| 5.3.2. <i>Who</i> and <i>which</i> in the BNC Spoken components, by L1 and event type                  | 107 |
| 5.3.3. <i>Who</i> and <i>which</i> in the BNC Spoken components, by domain                             | 110 |
| 5.4 The learner language corpus, LINDSEI   | 111 |
| 5.4.1. <i>Who</i> and <i>which</i> in LINDSEI  | 111 |
| 5.4.2. <i>Who</i> and <i>which</i> in LINDSEI, by L1, event type, and domain                           | 113 |
| 5.5. <i>Who</i> and <i>which</i> with collective antecedents   | 115 |
| Chapter 6. Summary and conclusion  | 119 |
| 6.1. Introduction  | 119 |
| 6.2. The first research question   | 120 |

|  |     |
|--|-----|
| 6.2.1. A summary of the investigation of the 3 <sup>rd</sup> person zero                   | 121 |
| 6.2.2. A summary of the investigation of the relative pronouns <i>who</i> and <i>which</i> | 122 |
| 6.2.3. Answer to the first research question   | 124 |
| 6.3. The second research question  | 125 |
| 6.4. The third research question   | 126 |
| 6.4.1. Event types   | 127 |
| 6.4.2. Domains   | 130 |
| 6.5. This research in the light of previous studies  | 131 |
| 6.6. Implications of this research   | 132 |
| References   | 134 |

## Tables

*Table titles are somewhat abbreviated.*

|   |       |
|---|-------|
| Table 1. <i>He/she/it</i> + present tense forms in ELFA   | 55    |
| Table 2. The 3 <sup>rd</sup> person zeroes in VOICE, by L1  | 59    |
| Table 3. <i>He/she/it</i> + zeroes in VOICE, by L1  | 60    |
| Table 4. <i>He/she/it</i> + zeroes in ELFA, by L1   | 62    |
| Table 5. Third person singular present tense forms in VOICE, by event type                          | 65    |
| Table 6. <i>He/she/it</i> + present tense forms in VOICE, by event type                             | 66    |
| Table 7. <i>He/she/it</i> + present tense forms in ELFA, by event type                              | 67    |
| Table 8. Third person singular present tense forms in VOICE, by domain                              | 68    |
| Table 9. <i>He/she/it</i> + present tense forms in VOICE, by domain                                 | 69    |
| Table 10. <i>He/she/it</i> + present tense forms in the BNC Spoken                                  | 72    |
| Table 11. Third person singular present tense forms, BNC Spoken by event type                       | 74-5  |
| Table 12. Third person singular present tense forms, BNC Context-governed by domain                 | 80    |
| Table 13. <i>He/she/it</i> + present tense forms in the BNC Written                                 | 81    |
| Table 14. <i>He/she/it</i> + present tense forms in LINDSEI   | 84    |
| Table 15. <i>He/she/it</i> + zeroes in LINDSEI (B turns), by L1                                     | 86    |
| Table 16. <i>He/she/it</i> + present tense forms in LINDSEI (B turns), divided into 3 L1 groups     | 87    |
| Table 17. The relative pronouns <i>who</i> and <i>which</i> , in VOICE                              | 95    |
| Table 18. The relative pronouns <i>who</i> and <i>which</i> , in ELFA                               | 96    |
| Table 19. Usage of the relative pronouns <i>who</i> and <i>which</i> , non-standard in VOICE, by L1 | 99    |
| Table 20. Usage of the relative pronouns <i>who</i> and <i>which</i> , non-standard in ELFA, by L1  | 101   |
| Table 21. The relative pronouns <i>who</i> and <i>which</i> in VOICE, by event type                 | 103   |
| Table 22. The relative pronouns <i>who</i> and <i>which</i> in ELFA, by event type                  | 104   |
| Table 23. The relative pronouns <i>who</i> and <i>which</i> in VOICE, by domain                     | 105   |
| Table 24. The relative pronouns <i>who</i> and <i>which</i> in the BNC Spoken                       | 106   |
| Table 25. The relative pronouns <i>who</i> and <i>which</i> in the BNC Spoken, by event type        | 108-9 |
| Table 26. The relative pronouns <i>who</i> and <i>which</i> in the BNC Context-governed, by domain  | 111   |
| Table 27. The relative pronouns <i>who</i> and <i>which</i> in LINDSEI                              | 113   |
| Table 28. Usage of <i>who</i> and <i>which</i> that is non-standard in LINDSEI (B turns), by L1     | 114   |

## Figures

*Figure captions are somewhat abbreviated.*

|   |     |
|---|-----|
| Figure 1. Kachru's circles model  | 10  |
| Figure 2. Third person singular present tense forms in VOICE                                      | 53  |
| Figure 3. Percentages of 3 <sup>rd</sup> person zeroes: this study compared with previous studies | 56  |
| Figure 4. Coefficients of <i>he/she/it</i> + zero to words per L1 group, in VOICE/ELFA            | 63  |
| Figure 5. Percentages of <i>he/she/it</i> + zero in ELFA/VOICE/VOICE Educational domain           | 70  |
| Figure 6. Percentages of 3 <sup>rd</sup> person zero in VOICE/ELFA/BNC Spoken                     | 73  |
| Figure 7. %s of 3 <sup>rd</sup> person zero in VOICE/ELFA/separate BNC Spoken components          | 76  |
| Figure 8. Percentages of <i>he/she/it</i> + zero of DO in BNC Spoken                              | 77  |
| Figure 9. Percentages of <i>he/she/it</i> + zero in event types of BNC Spoken/VOICE/ELFA          | 78  |
| Figure 10. Percentages of 3 <sup>rd</sup> person zero in VOICE/ELFA/BNC Spoken and Written        | 82  |
| Figure 11. Percentages of 3 <sup>rd</sup> person zero in VOICE/ELFA/BNC/LINDSEI B                 | 85  |
| Figure 12. Coefficients of <i>he/she/it</i> + zeroes to words per L1 group, in 3 corpora          | 88  |
| Figure 13. Percentages of usage of <i>who/which</i> that is non-standard in VOICE/ELFA            | 97  |
| Figure 14. Coefficients, non-standard <i>who/which</i> to words per L1 group in VOICE/ELFA        | 102 |
| Figure 15. Percentages of non-standard <i>who/which</i> in VOICE/ELFA/BNC Spoken                  | 107 |
| Figure 16. %s of non-standard <i>who/which</i> in VOICE/ELFA/separate BNC Spoken                  | 110 |
| Figure 17. %s of non-standard <i>who/which</i> in VOICE/ELFA/BNC Spoken/LINDSEI B                 | 113 |
| Figure 18. Coefficients of non-standard <i>who/which</i> to words per L1 group in 3 corpora       | 115 |
| Figure 19. Percentages of <i>who/which</i> with 'collective antecedents' in 4 corpora             | 117 |
| Figure 20. Percentages of <i>who/which</i> with <i>company/ies</i> in 4 corpora                   | 118 |
| Figure 21. Percentages of 3 <sup>rd</sup> person zero in VOICE/ELFA/BNC Spoken/LINDSEI B          | 122 |
| Figure 22. Same as Figure 17  | 124 |
| Figure 23. Percentages of non-standard <i>who/which</i> in VOICE/ELFA event types                 | 127 |
| Figure 24. Percentages of <i>he/she/it</i> + zero in VOICE/ELFA event types                       | 128 |

## **Chapter 1. Introduction.**

### **1.1. Candy animals.**

S3:     okay the candy animals do we have got something here erm yeah  
S1:     i'm interest in how it work how you open  
S3:     yeah i i i show you just a second  
S1:     you're getting a sample yeah can i  
S3:     yeah you have to remove the plastic  
[VOICE, file PBmtg3, 'business meeting at a food company', lines 3842-3846, complete.]

This exchange in English took place at a business meeting at a food company in Austria. The speaker 'S3' is male, aged between 25 and 34, is a sales employee at the company, and his mother tongue is the German spoken in Austria. The speaker 'S1' is male, aged over 50, is a logistics manager at a distribution company that sells the food company's products in Korea, and his mother tongue is Korean. The Austrian does not speak Korean, and the Korean does not speak German. They are using English to conduct their business. This is English as a lingua franca (ELF), which this thesis investigates, and compares with native and learner English.

Using English as a lingua franca is different from using it as a foreign language, which is 'English learnt specifically for communication with English native speakers' (Jenkins 2009*b*: 202-3). English in 2014 is a global language, and one of the ways it is used in the world is as a lingua franca, which is 'a language adopted as a common language between speakers whose native languages are different' (*The Concise Oxford English Dictionary*).

ELF is largely a matter of perspective. The men discussing candy animals do not seem to have a problem understanding each other, even though they have said some things that a teacher, teaching English as a foreign language (EFL), would correct. From an ELF perspective, however, the communication is effective, so the use of a non-standard form like *it work* (instead of *it works*) is unimportant, because communicative effectiveness takes priority over the notion of correctness. This does not dictate, however, how much or how often such non-standard features will appear in ELF.

### **1.2. The thesis topic: two non-standard features of English, in English as a lingua franca.**

This thesis is an investigation into corpora (collections of linguistic data) for non-standard features of English in English as a lingua franca, and for reasons of comparison, in native speech, and the language of advanced learners of English (or a mix of higher intermediate and advanced learners, depending on availability of data). The aim is to test claims in existing literature about the language in ELF events (an ‘event’ would be, for example, the candy animals meeting) being different from native-speaker English, or learner language. The language in the lines I quoted above, with all those non-standard features (e.g. *it work*), does not look like native speech, but the big picture could be very different. How common, really, are those non-standard features in ELF? How different is ELF from the language of advanced learners? Do these non-standard features appear even in native speech? The men discussing candy animals said some strange things, but that does not mean it is an ELF style all of its own. It is possible, in a corpus investigation, to discover the frequency of various features in ELF, native speech, and EFL learner language.

Although ELF cannot be considered spoken language only (see section 2.1), this thesis examines spoken data (as explained in section 2.14), and the corpora are collections of spoken linguistic data.

### 1.3. The research questions.

Two corpora of ELF have recently come into existence, the Vienna-Oxford International Corpus of English (VOICE) version 2.0 (2013), and the English as a Lingua Franca in Academic settings (ELFA) corpus (2008), which make it possible to examine the language being used in ELF events. There is enough space in this thesis to cover two non-standard features. The two that have been chosen are: the absence of the third person singular present tense *-s* ending (e.g. *it work*), and the interchange of the relative pronouns *who* and *which* (e.g. *are there any machines who make photos* [VOICE, file EDsve423, line 458, complete], or *rock stars in your country which are very famous* [VOICE, file PBmtg463, excerpt from line 1647]). Both of these non-standard features have been named in literature on ELF as “errors” that... [are] no obstacle to communicative success’ (Seidlhofer 2004: 220). This is the basis of the first research question.

1. Two non-standard features of English (the absence of the third person singular present tense *-s* ending, and the interchange of the relative pronouns *who* and *which*) are under investigation. Are the two non-standard features common to VOICE and ELFA? Are they found in a spoken native speaker corpus? Are they found in a spoken advanced



learner corpus? What are the comparative frequencies of these non-standard features, between corpora?

ELF involves the interaction of people with many different mother tongues, and it is important to determine whether the unusual language is produced as a result of the influence of the speakers' mother tongues (also known as first languages, or L1s). This is the basis of the second research question.

2. Are the frequencies of any non-standard features found influenced by the L1s of the speakers?

As stated above, ELF is largely a perspective in which communicative effectiveness triumphs over notions of correctness. Therefore it is important to look beyond L1 influence and to examine whether the context of ELF events influences the production of the non-standard features. This means looking at event types (whether the event is a meeting, or a conversation, or an interview, etc.), and domains (whether the event was in a business context, or an educational one, or one of leisure, etc.). This is the basis of the third and final research question.

3. Does the context of the interactions (event types or domains) influence the frequencies of any non-standard features found?

No part of the investigation is restricted to the ELF corpora; native and learner corpora are investigated throughout. The non-standard features in all the corpora investigated are examined by L1, event type and domain. In this way, possible influences on the differences between corpora can be understood.

#### **1.4 An overview of the thesis.**

Chapter 2 discusses the theory behind ELF. It defines ELF (section 2.1) and the term *lingua franca* (2.2) and explains it in relation to various aspects of global English (2.3-2.6). The differences between ELF and EFL, and how this affects learners of English, are explored (2.7-2.8). Chapter 2 also deals with the issues surrounding the non-standard features, discussing language change (2.9), the concept of error (2.10), non-standard features in ELF (2.11), and briefly, the related issue of communicative strategies in ELF (2.12). Chapter 2 also prepares the way for the investigation, with information about spoken grammar (2.13), spoken grammatical data (2.14), the cornucopia of non-standard features from which two have been selected (2.15), and a full introduction to the third person singular present tense *-s* ending (2.16), and the relative pronouns *who* and *which* (2.17).

Chapter 3 is the data and methods chapter. It introduces corpus linguistics (section 3.1), and the four corpora used in the thesis: VOICE (3.2), ELFA (3.3), the Spoken components of the British National Corpus (BNC) version 4.0, representing native speech (3.4), and the Louvain International Database of Spoken English Interlanguage (LINDSEI), representing higher intermediate to advanced learners (3.5). Chapter 3 also explains the WordSmith concordance with which I searched the corpora (3.6), and the CLAWS7 tagger with which I tagged ELFA and LINDSEI in order to search them (3.7). Section 3.8 explains how I deal with data from the corpora when speakers correct their own non-standard speech as they talk.

Chapter 4 is the corpus investigation of the 3<sup>RD</sup> PERSON ZERO (which is the term I use for the absence of the third person singular present tense *-s* ending). Its introduction explains which verbs were included in the investigation, and data that were excluded (section 4.1). The 3<sup>rd</sup> person zero is then described and compared in VOICE and ELFA (4.2), the BNC (4.3), and LINDSEI (4.4).

Chapter 5 is the corpus investigation of the relative pronouns *who* and *which*. Its introduction explains data that was included and excluded, and what I considered standard and non-standard usage of the relative pronouns (section 5.1). The interchange of *who* and *which* is then described and analysed in VOICE and ELFA (5.2), the BNC (5.3), and LINDSEI (5.4). An additional part of the investigation is the examination of *who* and *which* with ‘collective antecedents’ (5.5), an issue raised in chapter 2, section 17.5.

Chapter 6 is the summary and conclusion, which summarizes the investigation and attempts to answer the research questions (sections 6.1-6.4), places this thesis in the light of previous studies (6.5), and discusses its implications (6.6).

## Chapter 2. Theory.

### **2.1. Defining ELF.**

A straightforward definition of English as a lingua franca (ELF) can be elusive. One commentator, Mortensen, writes, ‘At the very least, we need to have a clear and consistent working definition... I do not think that we have such a definition at the moment’ (Mortensen 2013: 30). Jenkins defines ELF ‘[v]ery roughly’ as: ‘*English as it is used as a contact language among speakers from different first languages*’ (Jenkins 2009a: 143. Italics added), which despite being rough, fits with other definitions I offer here.

Mortensen sees a danger in defining ELF as ‘a language system’; ‘a natural language’; ‘a variety’ of English or ‘an emerging variety’; or as ‘a set of communicative strategies’ (Mortensen 2013: 28-30), as will be discussed (in sections 2.11, 2.12, and 2.16.4). There seems to be most agreement among ELF researchers on one of these points, that ELF is not a VARIETY. A variety can mean a number of things, as this definition shows:

Any form of a language seen as systematically distinct from others: thus the dialect of a specific region (e.g. Cornwall), any *more general form distinguished as a whole by speakers* (e.g. *American English or British English*), a social dialect, one of the forms distinguished in diglossia, a dialect used in a specific genre of literature, and so on (Matthews 2007: 426. Italics added).

In discussing the global role of a language (English in this case), it is the second meaning of variety that is meant here (italicized in the quote). Jenkins, Cogo, and Dewey take the position that ELF cannot ‘be considered a language variety or even a group of varieties’ (Jenkins, Cogo, and Dewey 2011: 296), while Seidlhofer has argued that the term ‘variety’ is in need of ‘quite radical reconsideration’ because it is used in the same way as it was ‘long before the days of mass international air travel, let alone electronic communication’ (Seidlhofer 2009a: 238). Nevertheless, Seidlhofer does not define ELF as a variety of English.

Barbara Seidlhofer is the founding director of an ELF corpus,<sup>1</sup> the Vienna-Oxford International Corpus of English (VOICE),<sup>2</sup> and she has this definition of ELF that focuses on its use: ‘*any use of English among speakers of different first languages for whom English is the communicative medium of choice, and often the only option*’ (Seidlhofer 2011: 7. Italics in original). This appears on the Frequently Asked Questions page of VOICE. As this current VOICE definition by Seidlhofer is not

---

<sup>1</sup> CORPUS (plural CORPORA) is defined in section 3.1.

<sup>2</sup> VOICE is described in section 3.2.

problematic for the critically-minded Mortensen (Mortensen 2013: 37), is high profile in the field of study, and is not presented as ‘very rough’, it is close to a suitable definition of ELF for this thesis. A word ought to be changed: ‘communicators’ is a better word than ‘speakers’ because ELF cannot be considered spoken language only, for example a corpus of written ELF is currently being put together, the Corpus of Written English as a Lingua Franca in Academic Settings (WrELFA). However, this is a very minor point, and throughout this thesis when ‘speakers’ of a language are referred to, it should be assumed that these individuals can also be writers.

The Seidlhofer definition does not include within ELF people who have English itself as a first language. This omission also applies to the other two definitions above. Seidlhofer, all the same, recognizes that ELF interactions<sup>3</sup> include situations such as ‘meetings at the United Nations headquarters in New York, tourist cruises around Sydney harbour, or academic conferences in Hyderabad’, and will thus include some native speakers (NSs).<sup>4</sup> 7.07% of the word tokens in VOICE<sup>5</sup> are spoken by NSs of English, as are 5.1% of the word tokens in the English as a Lingua Franca in Academic settings (ELFA) corpus.<sup>6</sup> These two corpora are the sources of ELF language data for this thesis, so it is important that the definition of ELF should include the minority of communicators with English as a first language. For this thesis, therefore, I offer my own definition, based on Seidlhofer’s: ENGLISH AS A LINGUA FRANCA (ELF) IS THE USE OF ENGLISH AMONG COMMUNICATORS OF DIFFERENT FIRST LANGUAGES (INCLUDING ENGLISH ITSELF), FOR WHOM ENGLISH IS THE COMMUNICATIVE MEDIUM OF CHOICE, AND OFTEN THE ONLY OPTION.

## 2.2. Lingua franca.

---

<sup>3</sup> INTERACTION in this thesis is meant in the colloquial sense of reciprocal communication between people, not in the interactional sociolinguistics sense, where it is narrowly defined as speech in face-to-face communication.

<sup>4</sup> NATIVE SPEAKER (abbreviated throughout this thesis as NS, plural NSs) is a ‘term used in linguistics to refer to someone for whom a particular language is a first language or mother-tongue. The implication is that this native language, having been acquired naturally during childhood, is the one about which a speaker will have the most reliable intuitions, and whose judgements about the way the language is used can therefore be trusted’ (Crystal (ed.) 2003: 308).

<sup>5</sup> The statistics for first languages in VOICE are online (VOICE, Statistics VOICE 2.0 Online: 2 First languages).

<sup>6</sup> ELFA is described in section 3.3. I requested the statistics for first languages in ELFA from the ELFA project via email. On 4/12/2013, they sent me a spreadsheet with the information, which they also then published online (ELFA, First languages represented in the ELFA corpus).

The definition of ELF in section 2.1 does not explain the words LINGUA FRANCA, yet an understanding of what constitutes a lingua franca is required for an understanding of ELF. *The Concise Oxford English Dictionary* defines it as ‘a language adopted as a common language between speakers whose native languages are different’, and by extension, its second meaning is ‘a system for mutual understanding’. Another dictionary defines it as ‘[a]ny language used for communication between groups who have no other language in common’, giving the example of Swahili in East and Central Africa (Matthews 2007: 227). The term, ‘lingua franca’, comes from the name of a particular language, Lingua Franca. Hence the third meaning offered by *The Concise Oxford English Dictionary*, ‘*hist.* a mixture of Italian with French, Greek, Arabic, and Spanish, used in the Levant’. It was ‘a trade language that was used between Arabs and Europeans in the Eastern part of the Mediterranean’ (Mortensen 2013: 26) from the 11<sup>th</sup> to 19<sup>th</sup> centuries. Its earliest written text dates from 1353 (Björkman 2013: 2). It has not always been recognized as being an actual language (Mortensen 2012: 27), and it has been regarded as a pidgin (see section 2.3), but regardless of its status, it gave its name to the linguistic term ‘lingua franca’, and in its use, it certainly seems to have been an example of a lingua franca.

The use of a language as a lingua franca has historically ‘involved territorial expansion and trading activities’ (Meierkord 2012: 34). Languages that spread during the colonial period are the most widely used as lingua francas today: Arabic, English, French, Spanish, and Portuguese, but English is the most global, with the highest number of second-language speakers, and the highest number of countries in which it is spoken (Meierkord 2012: 42-3). Jenkins offers six reasons for the spread of English internationally: historical, internal political, external economic, practical, intellectual, and entertainment (Jenkins 2009a: 40-1). There is no need to describe these reasons here; what is relevant is the fact of the global spread of English, which explains why it is the most widely used of all lingua francas.

### **2.3. ELF in relation to pidgins and creoles.**

A PIDGIN has been defined as a ‘simplified form of speech developed as a medium of trade, or through other extended but limited contact, between groups of speakers who have no other language in common...’ (Matthews 2007: 303). The original Lingua Franca has been viewed as a pidgin, ‘likely to have been based initially on certain Italian dialects and also to have included elements of Arabic, French, Greek, Persian, Portuguese, Spanish and Turkish’ (Jenkins, Cogo, and Dewey 2011: 282). Although there exist various pidgins of English, English used as a lingua franca is not itself a pidgin; it is ‘not a mix of languages, nor does it have limited vocabulary or syntax’ (Björkman 2013: 2).

Examples of pidgins given in a dictionary of linguistics are ‘the simplified forms of English, French, or Dutch which are assumed to be the origin of creoles in the West Indies’ (Matthews 2007: 303), and its definition of a CREOLE is ‘a language that has developed historically from a pidgin’ when ‘it becomes the only form of speech that is common to a community’ (Matthews 2007: 87).

What ELF has in common with pidgins and creoles is that it ‘has the same purpose... of enabling communication for speakers of different’ first languages (Björkman 2013: 28). There may be non-standard features<sup>7</sup> in ELF in common with pidgins and creoles (Björkman 2013: 147-9). This is indicated in Björkman’s study of an ELF setting,<sup>8</sup> a technical institute in Sweden with ‘a large number of exchange students and foreign scholars’ (Björkman 2013: 61), a study which consists of an estimated 502,000 words of transcribed English speech (Björkman 2013: 68). Morphosyntactic variation in the study was compared to three studies of features of creoles, and nine out of thirteen morphosyntactic features were found in both Björkman’s ELF setting and the creole studies (Björkman 2013: 148-9).<sup>9</sup> However, it is worth bearing in mind that the use of ELF and pidginized and creolized varieties of English are not mutually exclusive, because an ELF situation may include speakers of those varieties. Meierkord’s evidence from other lingua francas with a long history, Kiswahili, Malay, and Quechua, suggests that pidginized and creolized varieties are used in interactions with other varieties (Meierkord 2012: 26-32). ELF may therefore show considerable variation in its features, and different ELF situations may have different features in common with different varieties of English, including pidginized and creolized varieties. One cannot be certain what variety of English the speakers in ELF are influenced by (see section 2.8).

## **2.4. ELF domains and speakers.**

---

<sup>7</sup> The concept of NON-STANDARD is discussed in sections 2.11 and 2.13. FEATURE is defined in section 2.9.

<sup>8</sup> The *Oxford Concise Dictionary of Linguistics* insists that the meaning of the term SETTING ‘is generally obvious, of an act of speech in time, in place, in society, etc.’ (Matthews 2007: 366). I hope it is obvious to the reader that an ‘ELF setting’ is a particular place, circumstance, etc. where particular ELF interactions or events occur, hence the plural, ‘settings’, in the corpora ‘English as a Lingua Franca in Academic settings (ELFA)’ and ‘Written English as a Lingua Franca in Academic Settings’ (WrELFA).

<sup>9</sup> MORPHOSYNTACTIC is a ‘term used in linguistics to refer to grammatical categories or properties for whose definition criteria of morphology and syntax both apply, as in describing the characteristics of words’ (Crystal (ed.) 2003). By way of example, for Björkman the morphosyntactic variation was variation in marking or not marking the plural, variation in article usage, and so on. FEATURE is defined in section 2.9.

ELF must not be imagined as being particularly geographically located. English is used as a lingua franca across the world in a set of DOMAINS. Domains are ‘cultural or other settings in which different forms of speech may be appropriate’ (Matthews 2007: 111). The international domains in which English had become the working language by the 1990s are listed by Graddol:

1. Working language of international organizations and conferences
2. Scientific publication
3. International banking, economic affairs and trade
4. Advertising for global brands
5. Audio-visual cultural products, e.g. TV, popular music
6. International tourism
7. Tertiary education
8. International safety
9. International law
10. In interpretation and translation as a relay language
11. Technology transfer
12. Internet communication

(Graddol 1997: 8, cited in Björkman 2013: 5).

A selection of these same domains is discussed by Crystal. He examines a sample of 500 international organizations and finds that 424 make ‘official use of English – far more than any other language’, and 169 of them use only English (Crystal 2003: 87-8). Regarding international safety, he notes that the International Civil Aviation Organization agreed as far back as 1944 that ‘English should be the international language of aviation when pilots and controllers speak different languages’ (Crystal 2003: 108); and he traces the importance of English in ‘the electronic revolution’ to the fact that English was the language of the American ‘development of twentieth-century computers’ in the 1970s (Crystal 2003: 121). An examination of any domain on Graddol’s list would reveal the dominant use of English as a lingua franca in that domain today. Additionally, the list is by no means exhaustive. Meierkord comments that there are also informal settings of ELF, including ‘interactions with asylum seekers, informal interactions between students, and workplace situations’ (Meierkord 2012: 25). Meierkord considers this to be one of the ‘myths’ about ELF, i.e. ‘*As a lingua franca, English is an auxiliary language used for restricted communicative purposes only*’ (Meierkord 2012: 19. Italics in original); she offers the empirical evidence of informal settings as a challenge to it. A related ‘myth’ that she identifies is ‘*As a lingua franca, English is used by educated speakers of English*’ (Meierkord 2012: 20. Italics in original), and she challenges it with the existence of ‘individuals who have acquired English informally... usually outside the education system’ (Meierkord 2012: 25).

Chapter 3 will show which domains are covered by the ELF corpora that are investigated in this thesis (sections 3.24., 3.3.1, 3.4.3, and 3.5.1).

## 2.5. ELF in relation to international variety models of English.

Meierkord's third and final 'myth' about ELF is: '*The use of English as a lingua franca will result in the development of a homogeneous international variety which can be codified*' (Meierkord 2012: 20. Italics in original). That an international variety of English would develop, a type of English to be used at an international level, like McArthur's 'World Standard English', Görlach's 'International English', Modiano's 'English as an International Language', or the 'World Standard Spoken English' hypothesized by Crystal (Meierkord 2012: 20-22; Crystal 2003: 185), remains a prediction, which can neither be proven nor disproven, but Meierkord refers to the 'realities' of ELF interactions to posit instead future global English 'of a dynamic, hybrid character, open to influence from all existing Englishes and shaped by the participants of the individual interaction' (Meierkord 2012: 26). At the very least, it can be said that international variety models have little or nothing to do with ELF research. For instance, Dewey's survey of the perceptions of English language teachers shows no participants associating ELF with a 'universal global variety of the language' or with 'identifying a single monolithic form of English' (Dewey 2012: 151).

## 2.6. ELF in relation to Kachru's circles model.

Braj Kachru developed a model of the spread and use of English, in three concentric circles: the INNER CIRCLE, the OUTER CIRCLE and the EXPANDING CIRCLE.

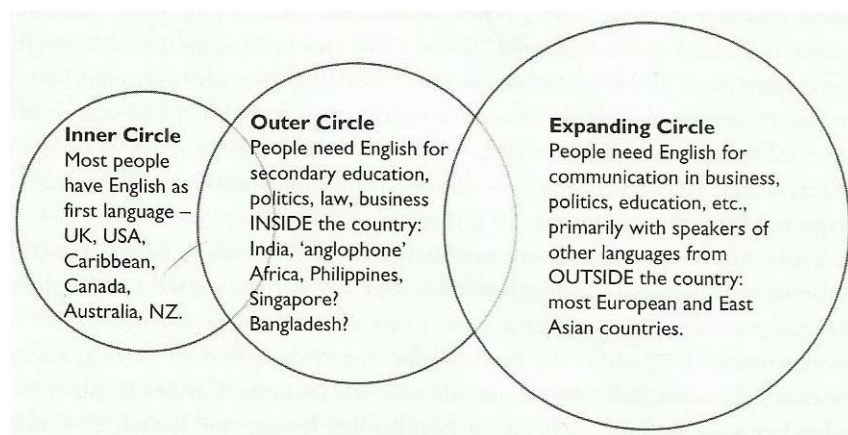


Figure 1. Kachru's circles model (Melchers and Shaw 2011: 8).

The model is geographical. It can be seen in Figure 1 what each circle defines, for instance the Inner Circle defines where in the world '[m]ost people have English as a first language' (Melchers and Shaw 2011: 8). These circles are not static. Since Kachru devised them in 1985, the use of



English has expanded in more ways than one, and countries such as Norway ‘which had originally been included in the Expanding Circle, because English did not perform significant functions in *intranational* communication, do now use English in tertiary education, business, or advertising, in ways that qualify them more for inclusion in the Outer Circle’ (Meierkord 2012: 5).

There are ‘three types of variety’ (Seidlhofer 2009*b*: 43) of English, which were identified in the early 1970s, three categories into which to sort English speakers: English as a Native Language (ENL), English as a Second Language (ESL), and English as a Foreign Language (EFL). These correspond to the Inner, Outer, and Expanding Circles, respectively. While there might be an expectation that ELF takes place within the Expanding Circle, and is therefore related to EFL, that does not fit the definition of ELF presented in section 2.1. Proponents of ELF as a field of research see it ‘as not fitting any of the three Circles but cutting across them’ (Seidlhofer 2009*b*: 49), something which can easily be imagined when one considers the global nature of communication in the domains of ELF listed in section 2.4. This means that within an ELF event (a conversation, or a meeting, etc.), there can be interaction between ENL, ESL and EFL speakers. In ELF as defined in section 2.1, there is a distinction between it – *the use of English among communicators of different first languages (including English itself), for whom English is the communicative medium of choice, and often the only option* – and EFL, ‘English learnt specifically for communication with English native speakers’ (Jenkins 2009*b*: 202-3). The differences between the two are explored in section 2.7.

## **2.7. Differences between ELF and EFL.**

A difference between ELF and EFL that Jenkins offers is that the ELF ‘is not a *foreign* language learnt for communication with its NSs’, but ‘a *world* language whose speakers communicate mainly with other’ non-NSs (Jenkins 2006: 140). This is not to say that ELF

is promoted to replace EFL as a learning target. This is not so. There will always be learners and users of English who need to blend in with native English speakers, or who wish to aspire to a native English accent. For such people, English as a foreign language (EFL) will be more realistic (Jenkins 2009*a*: 144).

The lingua franca use of English, in this way, is different to its use as a foreign language. In the case of ELF, then, Hülmbauer asks, ‘Does *correctness*, i.e. compliance with native speaker norms, or *effectiveness*, i.e. mutual intelligibility in intercultural communication, serve as the main consideration?’ (Hülmbauer 2009: 324). Can language use considered incorrect in EFL be effective in ELF? It has been reported, for example, that Korean Airlines use ‘French speakers of English, rather than British or American English speakers, because Koreans found the English of

the French more intelligible' (Jenkins 2009b: 203). When intelligibility is adapted as a priority in this way, it sidelines or downplays the notion of correctness. The incorrect (from an EFL point of view), when intelligible, would not then be perceived as a problem, from an ELF point of view. The difference can be distinguished in Dewey's survey of English language teachers. The sentence *We need to discuss about the problem*<sup>10</sup> in an evaluation task was rated two out of five for correctness by one teacher, and zero out of five by another; while both teachers rated it five out of five for intelligibility (Dewey 2012: 156-7).

However, intelligibility is not a priority in language teaching, as noted by one of the teachers, whose comment about the Cambridge Certificate in Advanced English is that 'if you... write something grammatically incorrect it's incorrect (,) even if it makes sense' (Dewey 2012: 160). Dewey writes that 'language assessment', such as that of the Common European Framework of Reference (CEFR), is 'characterised by a culture of correctness' (Dewey 2009: 71).

Yet however 'inadequate' the language of non-native speakers is 'in interaction with native speakers', among the non-native speakers themselves, there might not be this inadequacy, in an ELF situation (Meierkord 2012: 14). Meierkord refers to a study of Outer Circle and Expanding Circle speakers<sup>11</sup> by Yule, which suggests that in interactive conflict resolution, 'successful communication' is 'shared more effectively' when 'less fluent' speakers (the Expanding Circle speakers) are given the 'dominant (information transfer) position' (Yule 1990: 61).<sup>12</sup> In this, there seems to be an inverse relationship between cooperation and proficiency. This makes ELF interactions potentially fascinating, in the way information is transferred. Jenkins writes that from an ELF point of view, 'deviations from NS norms' are differences that can be seen as 'neutral' rather than as 'deficits' (Jenkins 2006: 140).

However, ELF does not have only communicative effectiveness as a priority. Intelligibility is actually in 'conflict' (Jenkins 2009a 42; Crystal 2003: 127) with another difference between ELF and EFL, that of group identity. This can occur on different linguistic levels, for example lexicogrammar, but it is most noticeable at the level of pronunciation, when some users of

---

<sup>10</sup> This is an example of inserting redundant prepositions (see section 2.15). In the corpus investigation, I came across *We will discuss about this issue* [VOICE, file PRpan585, excerpt from line 5].

<sup>11</sup> The speakers were 'international graduate students preparing to assume instructional roles as teaching assistants at Louisiana State University' (Yule 1990: 54).

<sup>12</sup> The task involved pairs of students, one a 'sender' of information, and the other a 'receiver'. Each student had a map, and could not see the other's map. The sender had to give the receiver directions. The maps had slight differences so that the sender's assumptions about the receiver's knowledge would not be accurate.

English will not adopt an NS accent, and this conflicts with the ‘demands of mutual intelligibility’, which would require ‘a decrease’ in ‘accent differences’ (Jenkins 2009*a*: 42). Speakers ‘may wish to preserve their mother tongue accent’, i.e. their group identity, or ‘they may simply wish not to identify... with native speakers of the language’ (Jenkins 2009*a*: 42). The difference between ELF and EFL here is that ELF provides ‘justification for not conforming to’ NS norms, because ELF is ‘international rather than associated with any one national speech community’ (Jenkins 2009*a*: 42). NS norms may also not be ideal for certain learning situations, as will be suggested in section 2.8. I will return to intelligibility and group identity in section 2.11.

## **2.8. ELF and learners of English.**

SECOND LANGUAGE ACQUISITION (SLA) is introduced by Ortega as ‘the scholarly field of inquiry that investigates the human capacity to learn languages other than the first, during late childhood, adolescence or adulthood, and once the first language or languages have been acquired’ (Ortega 2009: 1-2). SLA uses some terms that will be utilized in this thesis, such as L1, which is a mother tongue or first language, ‘refer[ring] to the language... or languages... that a child learns from parents, siblings and caretakers during the critical years of development, from the womb up to about four years of age’ (Ortega 2009: 5); and the related term L2, which ‘refer[s] to any language learned after the L1’ (Ortega 2009: 5).

Of relevance to ELF research is Firth and Wagner’s critique of mainstream SLA research, which questions, among other things, the conception of a foreign language speaker ‘as a deficient communicator struggling to overcome an underdeveloped L2 competence, striving to reach the “target” competence of an idealized NS’ (Firth and Wagner 1997: 295-6). In their view, SLA research tends to treat interaction between L1 and L2 speakers as inherently problematic, studying L2 ‘difficulties’ and ‘problems’ rather than focusing on L2 communicative ‘successes’ (Firth and Wagner 1997: 288; Ranta 2009: 85). They suggest that SLA should focus on the L2 as used ‘in everyday communication rather than focussing on data from formal learning environments (i.e. classrooms)’ (Ranta 2009: 86). In reference to ELF, Firth and Wagner observe that the ‘vast number’ of non-native speakers who ‘routinely interact with other’ non-native speakers for non-educational purposes, do not fit into ‘the assumed subservency’ of ‘learner/nonnative-as-defective-communicator’ (Firth and Wagner 1997: 292). In responses that were published in opposition to Firth and Wagner’s critique, it was suggested that ‘the goal of SLA was to study *acquisition* (not everyday *use*) of L2’ (Ranta 2009: 86), and according to Ranta, Firth and Wagner’s critique has not altered the SLA mainstream. This means that within the SLA field of inquiry, L2 speakers ‘are seen primarily as *learners* of the L2 on their way to native (or

near-native) proficiency in that language' (Ranta 2009: 86). This makes no room for the concept of learners of the L2 on their way to communicative effectiveness.

Consequently, Anna Mauranen, the project director of ELFA, takes a step away from SLA when she states that '[w]e can draw a line between second language use (SLU) and second language acquisition (SLA)', because '[u]sing a lingua franca means being a user of a second language (L2) but not a learner' (Mauranen 2012: 4). This separates the learner and user into two different roles. English is used as a lingua franca by a *user*, and there is a sociological difference between that role and that of an English language *learner*. ELF research is thus not concerned with language acquisition. For that reason, ELF data is not learner language<sup>13</sup> data to be evaluated against NS speech (see Ranta 2009: 88). Mauranen discusses the language learner in terms of a social position: 'Much of what separates learners and users boils down to the peculiar social environment of the classroom. A classroom is a social environment of its own kind which imposes particular social positions on learners that do not hold outside its confines' (Mauranen 2012: 4). Outside the classroom environment, learners adopt different social roles which, Mauranen points out, may include the role of user of that same language.

While those who speak English once they step outside the classroom may no longer be in the social position of a learner, at least in ELF settings,<sup>14</sup> there are questions of whether NS norms always apply *inside* the classroom.

First, there is the suggestion of 'blurring' of Kachru's circles. While Kachru accepted that Outer Circle countries developed their own norms, he saw Inner Circle countries as 'norm-providing' for the 'norm-dependent' Expanding Circle (Björkman 2013: 4). However, Lowenberg observes that 'many students in English in the Expanding Circle now study English in Outer Circle settings', for instance Korean students being taught English in the Philippines, and that his analysis 'indicates that many of these Expanding Circle learners are being taught English using Outer Circle norms' (Lowenberg 2002: 434). Dewey points out that the international professional association Teachers of English to Speakers of Other Languages (TESOL) sees English as an 'additional' language rather than a 'foreign' language, and a 'Position Statement' of the

---

<sup>13</sup> The term LEARNER LANGUAGE 'stems from the studies of second language acquisition' (Ranta 2009: 85). 'SLA scholars who investigate learner language seek to explain L2 competence and L2 development' (Ortega 2009: 110). As it is a well-worn term, it is used in this thesis, and in context there does not seem to be a need to specify whenever 'learner speech' (i.e. speech not writing) is meant.

<sup>14</sup> It can be imagined, for example, that those who travel to an Inner Circle country to learn English in classrooms with the purpose of speaking English to NSs are still sociologically 'learners' outside the classroom, when they are out in the streets and fields of that country.

organization states that ‘a singular or monolithic approach to the modeling of English is no longer tenable’ (Dewey 2012: 147). The ‘norm-providing’ role of the Inner Circle could be undergoing erosion.

Second, there is the issue of a need for context in the teaching of the English language. For example, there is the circumstance of English as a particularly ‘Asian’ lingua franca. The Association of Southeast Asian Nations (ASEAN) signed its Charter in 2009, Article 34 of which states that its working language is English. This is the lingua franca use of English between speakers of different Asian languages, and it is a prominent new role for the language. It has led ‘previously Francophone nations... to move to adopt English as their major foreign language’ (Kirkpatrick 2012: 124). ASEAN countries’ languages are not taught in each other’s schools. Instead they learn lingua francas, such as English and Mandarin Chinese (Kirkpatrick 2012: 125). The purpose of learning English in this region is thus ‘to be able to use the language successfully in multilingual settings’ (Kirkpatrick 2012: 131). It is used primarily as a regional lingua franca, therefore native-like competence in it is not as important as intercultural communication in English with regional cultures, which are not ‘traditionally associated with native speakers of English’ (Kirkpatrick 2012: 133). Learners will likely *not* go on to use the language with an NS, who thus ceases to become the ideal teacher. Andy Kirkpatrick, currently leading the compilation of an ELF corpus, the Asian Corpus of English (ACE),<sup>15</sup> points out that the topics discussed in English throughout the ACE data – ‘the relative heat of chillies as a measure of jealousy, the smuggling of people across the border from Burma into Thailand’, and so on – suggest that the ideal English teacher ‘is the local multilingual who will have the greater facility in demonstrating appropriate language and in understanding the cultural connotations of it’ (Kirkpatrick 2012: 133).

This need to contextualize English in the classroom is not limited to ASEAN countries. Zheng’s qualitative study of the motivation of Chinese learners of English suggests that learners’ motivational self-images are based on NS norms established by both the classroom and cultural products. The study suggests that this has a ‘debilitating effect’ on the learners’ motivation, which could instead be helped by teachers creating an ‘ELF-using experience, such as inviting successful ELF speakers to the classroom or providing curriculum focused on global issues’ (Zheng 2013: 359). In other words, the learners could be shown a context in which they could conceivably find themselves using English in the real world.

---

<sup>15</sup> His role is mentioned here for example: <<http://www.griffith.edu.au/humanities-languages/school-languages-linguistics/news-events/asian-corpus-english-workshops>>.

These needs of learners identified by Kirkpatrick and Zheng raise the issue of the practical teaching implications of ELF research. If learners were to be educated in English not to conform to NS norms, but to communicate effectively in ELF situations (or to hold on to their group identity), the traditional objectives of English language teaching would therefore be altered. It is outside the scope of this thesis to address whether or how ELF could or should be brought into the classroom; it suffices to have pointed out the particular needs raised by Kirkpatrick and Zheng, and that Lowenberg's observations and TESOL's 'Position Statement' may indicate that alterations of teaching objectives, of one kind or another, have occurred.

## 2.9. ELF and language change.

One important term which is in the title to this thesis, and is important to define before discussing language change, is *FEATURE*. It is a term used 'to refer to any typical or noticeable property of spoken or written language' (Crystal (ed.) 2003: 177), for example grammatical features or pronunciation features. The term is salient to this thesis because it covers both forms and usage. The term *FORMS* is used with various meanings in linguistics (there are references in this chapter to a 'form of a language', a 'form of speech', and a 'form of English', for example) but most often in this chapter it is meant according to the following definition.

The variant realizations of a linguistic unit are referred to as 'forms' of the unit, i.e. the members of a set of paradigmatic alternatives. For example, the forms of the verb *walk* are *walk*, *walking*, *walks*, etc. (Crystal (ed.) 2003: 185).

*USAGE* is the 'manner in which a word or a construction is commonly used in a language' (Trask 2000:140), for example how *who* and *which* are used as relative pronouns.

With those terms defined, language change can be discussed. ELF as language behaviour is tied to speech and writing events that are usually short-lived, and therefore the behaviour is transient. Yet while 'ELF groupings are often temporary' (Mauranen 2012: 19), and have a 'fleeting nature' of 'impermanence', long-term ELF interactions do exist: 'groups like research teams can last for years' (Mauranen 2012: 20).<sup>16</sup> According to Mauranen, those 'engaged in spoken interaction gravitate... towards endonormativity', for example adopting 'ad hoc terms or usages between

---

<sup>16</sup> I contacted ELFA and VOICE to ask if any of the speech events involve speakers who have been interacting in English for years. Ray Carey of ELFA replied by email on 6/2/2014 to inform me that the ELFA speech events are transient (academic conferences; seminar and lecture courses; Finnish colleagues speaking English together but who probably speak Finnish most of the time). Nora Dorn of VOICE replied by email on 14/2/2014 to inform me that some speech events *are* examples of long-term interaction (a particular company; a particular couple), which can be identified in the files via headers and speaker ID.

themselves' (Mauranen 2012: 25), which means long-term ELF interactions would develop group norms.

Kachru had the sense of the Outer Circle being ENDONORMATIVE, i.e. looking inwards for norms, being 'norm-developing', and the Expanding Circle being EXONORMATIVE, 'norm-dependent' on the Inner Circle<sup>17</sup> (Pitzl 2012: 35). ELF consists of a multiplicity of differently-constituted situations, and cannot be as stable as a variety of English (like British English, or Indian English, etc.), but in the sense of a long-term interaction it could become stable, because group endonormativity could develop. In certain long-term communities, 'unconventional linguistic practices may become conventional' for that ELF group (Pitzl 2012: 39).

Schneider suggests that 'where interaction remains stable in similar constellations over a longer period of time, then the outcome is likely to be more predictable' (Schneider 2012: 87). ELF communication contexts such as the UN, EU, and ASEAN could be sources of data relevant to this. Meierkord notes that the officials of the EU constitute a community who 'speak a particular variety of English' (Meierkord 2012: 212, note 6). Schneider writes that if ELF interaction became sociolinguistically stable, an ESL variety could evolve from it. The term 'ESL varieties' refers to the Outer Circle Englishes resulting from British colonialism. Schneider's hypothesis is that 'emerging ESL varieties must have been going through an ELF-like stage in their early developmental stages' when colonized people began to 'acquire and adopt' English (Schneider 2012: 85). He suggests ELF and ESLs 'share some fundamental evolutionary developments' and 'ELF and ESL may be viewed as representing different evolutionary stages' (Schneider 2012: 87). Schneider assumes for his hypothesis that the cognitive processes of language acquisition are the same for ELF and ESL, and this would mean that stable ELF interaction could produce linguistic features familiar from ESLs, for example, the absence of morphological markers, like -s endings (Schneider 2012: 64).

Of course, ELF might also reflect the evolution of ENL (English as a Native Language: the Inner Circle Englishes – British, American, etc.). Jenkins makes the point that the English language has evolved over the centuries through

natural processes such as regularisation. For example, the six Old English present tense verb endings from the eighth century have, over the years, been reduced to two endings, -s on the third person singular and zero marking on the others. So we might expect this process to continue and the -s to be replaced with zero eventually (Jenkins 2009a: 149).

---

<sup>17</sup> Or, as mentioned in section 2.8, it could sometimes be dependent on the Outer Circle.

Some features that can be seen in ELF data, whether grammatical like the above example, or pronunciation features, might be accelerated processes of change that have been taking place in ENL. Lowenberg calls this ‘the extension of certain innovative processes... that are also very productive in, and frequently cause differences between, the Inner Circle varieties of English’, for example the conversion of uncountable nouns to countable nouns. So, *a hard work*, said by a Korean, is unacceptable to Inner Circle speakers, but *lettuces* and *attendances*, countable in British English, are unacceptable to American English speakers (Lowenberg 2002: 432). Based on Lowenberg’s observations, Jenkins writes that ‘What seems to be happening... is that ELF speakers in many cases... are simply accelerating the processes that have already been taking place more slowly in ENL’ (Jenkins 2009a: 149).

ELF data could therefore be interpreted either as an early stage of ESL English, or as an accelerated version of ENL English!

On a different tack, Mauranen (2012: 27-36) writes of language change induced by language contact. ELF takes place in multilingual environments, involving people of varied linguistic backgrounds, and even NS participation will involve contact between different varieties of English. This would lead one to expect a certain amount of contact-induced change, and Mauranen writes about how this could occur through processes, including LEVELLING, which can be defined as ‘the gradual loss of a linguistic distinction, so that forms which were originally contrastive become identical’ (Crystal (ed.) 2003: 265). Mauranen writes:

Examples of features that might be affected in English through loss of marked features are things like highly idiomatic phraseology, irregular plural or past tense forms, word order in indirect questions, or the third singular -s ending (Mauranen 2012: 32).

This means that with the addition of so many new speakers of English around the globe, features could become levelled through language contact, via ELF. Of course, this is speculation about the far future, and leads Mauranen immediately to ask, ‘How long is a long time?’ for language change (Mauranen 2012: 32), and theorizes about ELF use having an effect on English over 60-70 years (Mauranen 2012: 33).

## **2.10 Defining error.**

The issue of ‘correctness’ versus ‘effectiveness’ was raised in section 2.7. One of the implications of that issue is the question of what to call non-native-like language use.



- 1       okay let's say that *it* already *exist* or [VOICE, file POWgd378, line 100, complete.]<sup>18</sup>
- 2       there's *one particular author which* you can strongly associate with this kind of thinking  
[ELFA, file ULEC210, excerpt from sentence.]<sup>19</sup>

Looking at these examples from the perspective of a user of ELF, the lack of an *-s* ending to *exist* and the use of *which* instead of *who* with *author* do not impede communication (i.e. it is evident what the speaker means), so these could be called neutral differences. From an EFL learner perspective, such language use would not be accepted as native-like, and the examples would be considered errors. As this perspective is relevant to sections 2.11, 2.13, and 2.15, it is important to define what is meant by ERROR. This thesis will adopt a 'traditional notion of error based on the language user's ability to conform to a set of real or imagined standards of expression' (Crystal (ed.) 2003: 165), specifically in this case the standard of NS English. So, the standard of expression for the first example is *it already exists*, and *it already exist* is an error; the standard of expression for the second example is *one particular author who*, and *one particular author which* is an error. This is what is meant by error within the EFL learner perspective: not conforming to the set of standards of expression of NS English.

(Additionally, errors are treated on the basis of performance rather than competence in this thesis, as is explained in section 3.8.)

## 2.11. Non-standard features in ELF.

Section 2.8 introduced the idea that a learner of a language has a different social role to that of a user of a language (while the same person could fulfil the same role at different times). Regardless of whether the speaker has a learner or user role, this has no effect on the use of the term NON-STANDARD. A feature remains classified as non-standard irrespective of the EFL or ELF perspective described in sections 2.7 and 2.10, i.e. whether the feature is viewed as an error, communicatively effective, or a manifestation of group identity. NS English is retained as a notional standard, in order to describe the features under discussion.

Claims have been made that non-standard forms are shared by ELF speakers (e.g. in VOICE, in Breiteneder 2009) (see section 2.16.4). The claims are that non-standard forms are shared by speakers from different L1 backgrounds; for Kirkpatrick, 'this suggests that the speakers' L1 may not be as influential in the production of morpho-syntactic forms as previously thought'

---

<sup>18</sup> All indented examples in this chapter are numbered, and this is number 1. The italics are added in all examples unless otherwise stated.

<sup>19</sup> There are no line numbers in ELFA. Excerpts are often quoted, rather than full sentences, because of their length.

(Kirkpatrick 2012: 132). Shared non-standard features (including forms) also implies less influence by varieties of English (see sections 2.3 and 2.8). In this thesis, non-standard features (see section 2.15) are examined in the data for their frequency and for any patterns to their occurrence. They are examined by L1; domain (see section 2.4); and EVENT TYPE, which is the general function or form of an event, whether a discussion, meeting, or conversation, etc., analogous to ‘genre’ in text. Any one of these could have influence on the language produced.

Mortensen criticizes research attempting ‘to identify characteristic features of ELF’ (Mortensen 2013: 31), on the basis that it treats ELF as a variety of English. His objection is based on the lack of evidence for any non-standard form being characteristic of ELF in the sense of being common to all ELF events, or unique to them (Mortensen 2013: 31-2). In Björkman’s recent study (described in section 2.3), she agrees that ELF is not *sui generis*, finding no features unique to it: ‘If ELF were *sui generis*... there would be... unique and consistent non-standard usage’ (Björkman 2013: 150-1).

However, the question of ELF having variety status can be left open. Variety, as defined in section 2.1, does not have to have features that are ‘common to all’ or ‘unique’, as Mortensen would have it, or as Björkman seems concerned about. Most features of American or Australian English are not common to all events or unique to those varieties; it is largely a matter of frequency of the features (e.g. a feature that occurs more often in American English than in another variety). This means that research into non-standard features in ELF can be considered independently of labelling ELF as a variety.

Some difference in non-standard features between ELF and NS data is expected because most ELF speakers do not have English as an L1. The additional comparison in this thesis, with learners who are advanced learners of English as a Foreign Language (EFL) (see LINDSEI handbook 2010: 7),<sup>20</sup> investigates whether non-standard features are different among advanced learners than among people speaking in ELF settings (which includes people using English professionally), that is, whether language difference accompanies the sociological difference.

A major difference is in how non-standard features are interpreted (see section 2.10): they are errors if correctness according to NS standards is the priority (see section 2.7), but they do not have to be called errors if the priority is lingua franca use, which means a (sometimes

---

<sup>20</sup> The Louvain International Database of Spoken English Interlanguage (LINDSEI) is described in section 3.5. The description of the LINDSEI learners as advanced is elsewhere qualified by the statement that ‘the proficiency level in LINDSEI is best described as ranging from higher intermediate to advanced’ (LINDSEI handbook 2010: 10).

contradictory) mixture of intelligibility (communicative effectiveness) and identity (e.g. preservation of the mother tongue accent) (see section 2.7). THE AIM OF THE PRESENT THESIS IS TO TEST CLAIMS THAT THE LANGUAGE ITSELF IN ELF EVENTS IS DIFFERENT TO NS ENGLISH, OR EFL LEARNER LANGUAGE. This is where the research questions posed in chapter 1 become relevant. The first question asks if the two chosen non-standard features are common to the spoken ELF corpora VOICE and ELFA, if they are found in spoken NS and learner corpora, and what are the comparative frequencies between corpora. (Section 2.14 explains why the data is spoken, not written.) The aim of the second and third research questions is to discover WHETHER ANY DIFFERENCES BETWEEN ELF, NS ENGLISH, AND EFL LEARNER LANGUAGE ARE INFLUENCED BY THE L1S OF THE SPEAKERS, OR OTHER CONTEXTUAL FACTORS.<sup>21</sup>

## 2.12. Strategies in ELF.

Yule's (1990) study (described in section 2.7), suggests that less proficient speakers of English cooperate more than proficient speakers do. Jenkins, Cogo, and Dewey go further, describing 'mutual cooperation as a major characteristic of ELF communication', and for them this is an example of 'ELF pragmatics' (Jenkins, Cogo, and Dewey 2011: 293).

While the use of pragmatic strategies may be found in ELF (e.g. Björkman 2013: 155), Mortensen is perturbed by Jenkins, Cogo, and Dewey's above statement, and by such assumptions throughout ELF research. He is concerned that the 'underlying idea here seems to be that certain types of communicative behavior can be identified as *characteristic* of ELF interaction and thus be used to distinguish ELF from other types of interaction' (Mortensen 2013: 33. *Italics in original*). He uses the example of the pragmatic strategy called 'let it pass', which Jenkins, Cogo, and Dewey also refer to. 'Let it pass' means letting 'unclear utterances from... interlocutors pass without explicit mention, apparently on the assumption that what was unclear would either turn out to be redundant or be clarified in subsequent talk' (Mortensen 2013: 33). Mortensen is able to refer to studies (Knapp 2002: 231-8; Jenks 2012) 'where participants in ELF interaction are not found to be inherently mutually supportive and prone to letting-it-pass' (Mortensen 2013: 34).

---

<sup>21</sup> Mortensen argues that 'ELF encounters are multilingual, multicultural, and multinormative speech events that are shaped by a considerable number of contextual factors' (Mortensen 2013: 42), i.e. 'the language use... might look different in different ELF contexts' (Mortensen 2013: 38). Carey writes about putting 'greater focus on the context and purpose of use [of ELF], which can influence the form of ELF more than the fact that is being deployed by second-language users' (Carey 2013a). This thesis examines obtainable contextual information: domains and event types.

In the most recent of these studies (Jenks 2012), Jenks examines fifty hours of online voice-based chat rooms (Skypecasts), and instead of evidence of ‘let it pass’, Jenks finds that the participants do ‘highlight problems or troubles in communication’ – after a short delay, but at ‘the earliest (speaker) transition relevant places’ (Jenks 2012: 401). Jenks makes the point that

given the academic and business contexts investigated in many ELF studies, where institutional goals often compel interactants to build consensus, it is easy to understand why the literature has characterized ELF interactants as being largely cooperative (Jenks 2012: 389).

In Jenks’s Skypecast context, the link between ELF and ‘let it pass’ is broken.

Mortensen expects a pragmatic strategy to be ‘*common* to all cases of ELF interaction’ or ‘*unique* to ELF interaction’ (Mortensen 2013: 34. Italics in original), in order for it to indicate that ELF is ‘a set of communicative strategies – a system for how language is *used*’ (Mortensen 2013: 34. Italics in original). While ELF might not indeed be such a system, it seems overly narrow to demand the only evidence be communicative strategies common to all ELF interactions, or unique to them. At any rate, this thesis does not have to establish whether ELF is a language system in this sense. The focus of this thesis is on grammar in ELF corpora, and it will not examine any strategies used.

### **2.13. Spoken grammar and possible vernacular universals.**

There is a question whether all non-standard language is definitely non-standard, even for NSs.

The data for this thesis consists of spoken language (see section 2.14). Ranta points out that L2 speakers’ ‘*spoken production* has often been compared with *standard language* – which is essentially based on written language norms’ (Ranta 2009: 89. Italics in original). This is significant, in that often when the term ‘non-standard’ is applied to a feature in spoken language, the point of comparison is not with spoken language but with *written* language. Some features may actually be features of *spoken* English grammar. A relatively recent overview of spoken English in England by David Britain concludes that ‘a wide range of grammatically non-standard forms... are the rule rather than the exception’ (Britain 2010: 53). Examples included two or more negatives used in a clause, e.g. *I didn’t do nothing!*, found across England (Britain 2010: 44), and the application of the –s ending ‘across the whole verbal paradigm’ in the south west and parts of the north, e.g. *We eats there most Sundays* (Britain 2010: 39). The spoken grammar of only parts of England have been well described, and Britain writes that there are ‘huge gaps in our knowledge of the present-day grammars of varieties in England’, including ‘from a sociogeographical perspective – which non-standard grammatical forms are used in place X, and by what sort of speakers there?’ (Britain

2010: 53). It is worth bearing in mind in the corpus investigation, when I compare the ELF corpora to an NS corpus (the British National Corpus (BNC)),<sup>22</sup> that there is spoken NS usage outside that corpus (not least because it is data from only one Inner Circle country), but also outside current recorded data entirely.

Ranta compares a sample of data from ELFA to a sample of data from an NS corpus, the Michigan Corpus of Academic Spoken English (MICASE). The first quotation below is from ELFA and the second from MICASE:

- 3        in honduras and in nicaragua but we have to see that *there is* er *some differences* between the countries (Ranta 2009: 97.)
- 4        so um in the United States *there's a hundred to four hundred and fifty cases* of it (Ranta 2009: 98.)

Here it can be seen that in both corpora there can be found *there is* or *there's* instead of the (written) standard *there are*. Ranta actually finds ELFA speakers to be 'more norm-oriented' (Ranta 2009: 98) in the use of this form, with a higher frequency of the non-standard form appearing in the MICASE sample. For Ranta, examples such as this undermine the concept of error. The wider implication is that both ELF and learner data should be compared to NS spoken grammar before they are considered 'non-standard' for spoken English. Ranta wonders whether spoken language 'may... have structures of its own that have been "smoothed out" of standard, written language' (Ranta 2009: 102).

'There exists research that examines the possibility of VERNACULAR UNIVERSALS, 'the presence of non-standard forms in all vernacular varieties of English' (Kirkpatrick 2012: 132), 'features that appear to be similar in spoken Englishes around the world' (Ranta 2009: 102). These seem to be 'a small number of phonological and grammatical processes' that 'recur in vernaculars wherever there are spoken' (Chambers 2004: 128). Chambers, quoted here, does not believe that 'the features were diffused... by the founders of the dialect', i.e. geographically, and finds them 'not only in working-class and rural vernaculars but also in child language, pidgins, creoles and interlanguage'<sup>23</sup> varieties' (Chambers 2004: 128). Chambers' 'candidates' (Chambers 2004: 128) for these processes include a few phonological processes (which do not need to be mentioned here), and the following four grammatical processes.

---

<sup>22</sup> The BNC is described in section 3.4.

<sup>23</sup> I assume Chambers is using the SLA term INTERLANGUAGE, which is defined as 'learners' mental grammar, and the special variety of language that it generates when they speak or sign, interact, write, negotiate and express themselves in the L2, based on the mental representations they forge of the new grammar' (Ortega 2009: 6). Hence, 'Louvain International Database of Spoken English Interlanguage'.

Conjugation regularization, or leveling of irregular verb forms, as in *Yesterday John seen the eclipse* and *Mary beared the good news*.

default singulars, or subject-verb nonconcord, as in *They was the last ones*.

multiple negation, or negative concord, as in *He didn't see nothing*.

copula absence, or copula deletion, as in *She smart* or *We going as soon as possible*. (Chambers 2004: 129.)

There is no direct correlation,<sup>24</sup> that I have seen, between phonological or grammatical candidates for possible universal vernacular processes, and non-standard features discussed in the literature on ELF. That does not alter the fact that the possible existence of vernacular universals would change what can definitely be considered 'non-standard' in spoken English.

In this thesis, ELF (and learner) corpora will be compared to NS corpora, through the frequency of particular non-standard features. The issues of spoken grammar and possible vernacular universals will therefore be relevant to the meaning of comparisons to NS English.

#### **2.14. Spoken grammatical data.**

Research into ELF covers many areas. Jenkins, Cogo, and Dewey report on research in phonology, lexis/lexicogrammar, pragmatics, and linguistic flexibility and fluidity (Jenkins, Cogo and Dewey 2011: 287-297). Of course, it is not possible for this thesis to cover all these.

This thesis examines spoken, not written data. There is no currently available corpus of written ELF, and also a focus on spoken data is actively encouraged by the corpus compilers of spoken ELF. 'Spoken interactions are immediate and at a remove from the stabilizing and standardizing influence of writing,' is stated on the VOICE Frequently Asked Questions page. The project director of ELFA also argues in favour of spoken data:

A speech-in-interaction approach is particularly valuable to ELF, because ELF communities are unusually heterogeneous in terms of linguistic and cultural backgrounds, and it is when the speakers come together and negotiate their differences and commonalities that we can capture their mutual influence and adaptation as these processes take place. Crucially, interaction is the only situation where we can observe miscommunication taking place... (Mauranen 2012: 46).

Within the spoken data, the focus of this thesis is on grammar; it will not focus on phonology. There are various areas of lexis and lexicogrammar that could be explored, but as will be seen in section 2.15, the chosen features of the language for investigation are grammatical. Pragmatics was not considered as a focus for the thesis, and as suggested in section 2.12, there may be no

---

<sup>24</sup> Although there *is* a connection between Chambers' first candidate – the process of levelling – and the non-standard form chosen for investigation in section 2.16. Levelling itself is described in section 2.9.

especial ‘ELF pragmatics’ anyway. As for linguistic flexibility and fluidity, Jenkins, Cogo, and Dewey recognize the ‘dilemma’ in ELF between this inherent fluidity and claims of ‘regularities’ (Jenkins, Cogo, and Dewey 2011: 297). It seems to me that flexibility and fluidity are to be expected in ELF events (see section 2.3), but shared non-standard features are not, and are therefore worth investigating.

## 2.15. Errors that are no obstacle to communicative success.

This thesis will investigate non-standard features that fit two simple criteria.

First, from an ELF point of view they would not be considered errors (as defined in section 2.10) if there is communicative effectiveness. (The group identity aspect of the ELF perspective can be left to one side, as I did not find any examples of grammar used for this purpose in the corpus investigation.) The reason for focusing on what would not be an error from an ELF point of view is that otherwise I would be investigating non-standard features that would uncontroversially be considered erroneous (as ‘error’ is defined in section 2.10) in standard English, learner language *and* ELF.

Second, the non-standard features must appear in existing literature on ELF. Looking at what comes up in the literature, there are at least thirteen possibilities for the corpus investigation for this thesis. Eight of the thirteen are taken from Seidlhofer, presented by her as ‘typical “errors” that most English teachers would consider in urgent need of correction’ but ‘generally unproblematic and no obstacle to communicative success’ (Seidlhofer 2004: 220). These eight are described by Jenkins, Cogo, and Dewey as ‘preliminary hypotheses’, and ‘subsequent papers that report findings in ELF lexis and lexicogrammar have tended to take’ them as a ‘point of departure’ (Jenkins, Cogo, and Dewey 2011: 290), and this thesis is no exception:

Dropping the third person present tense –s<sup>25</sup>

Confusing the relative pronouns *who* and *which*

Omitting definite and indefinite articles where they are obligatory in ENL,<sup>26</sup> and inserting them where they do not occur in ENL

Failing to use correct forms in tag questions (e.g. *isn’t it?* Or *no?* instead of *shouldn’t they?*)

Inserting redundant prepositions, as in *We have to study about...*

Overusing certain verbs of high semantic generality, such as *do, have, make, put, take*

---

<sup>25</sup> An example is *he look very sad* (Prodromou 2008: 31).

<sup>26</sup> An example is *our countries have signed agreement* (Prodromou 2008: 31).

Replacing infinitive-constructions with *that*-clauses, as in *I want that [...]*

Overdoing explicitness (e.g. *black color* rather than just *black*)

(Seidlhofer 2004: 220).

Jenkins points out that Seidlhofer ‘always inserts scare quotes around’ the words ‘dropping’, ‘confusing’, ‘omitting’, ‘failing’, ‘redundant’, ‘overusing’, ‘replacing’, and ‘overdoing’ in this context

to indicate that they are not relevant to ELF, which, unlike EFL, should be considered *in its own right* and not by comparison with an ENL yardstick. Unfortunately, the publisher of Seidlhofer (2004) removed the scare quotes in error... (Jenkins 2009a: 146, italics in original).

Björkman reminds us that ‘Seidlhofer’s study did not offer a list of features that resulted from empirical research’ – the list is well known for another reason: it ‘presented non-standard usage as variants instead of deviant... usage’ (Björkman 2013: 50). The aim of this thesis, however, is to examine, if possible, Seidlhofer’s hypotheses empirically.

The other five candidates for corpus investigation come from non-standard features found in later ELF studies: Prodromou (2008), Cogo and Dewey (2012), and Björkman (2013).<sup>27</sup>

Substituting bare infinitive for *-ing*: *I look forward to see you* (Prodromou 2008: 31).

Prepositions, e.g. *look this picture* (without *at*), *listening music* (without *to*), *depends of the issue* (adding *off*), and so on (see Cogo and Dewey 2012: 53, 55).

Collocation, e.g. *done* instead of *made* in *done so many efforts* (see Cogo and Dewey 2012: 73).

Absence of raised negation from the subordinate clause to the main clause, e.g. *I think it is not right to plot these in the same diagram* (Björkman 2013: 91-2).

Non-standard analytic comparative, e.g. *more narrow* (Björkman 2013: 92).<sup>28</sup>

Ideally, all thirteen, and claims about them in ELF literature, would be investigated, but this thesis will examine the first two on the list, which concern forms in the third person singular present tense (described in section 2.16), and the usage of the relative pronouns *who* and *which* (described in section 2.17).

---

<sup>27</sup> Björkman also writes of non-standard features found in ELF data that *are* obstacles to communicative success: ‘This type of deviance differs... since it... sometimes disturbs communication and leads to repetition and rephrasing in some cases’ (Björkman 2009: 235). The type of deviance she refers to is non-standard question formation, e.g. *Why it is like this?*, *Why we place it there?* (Björkman 2013: 89). This is interesting in that it indicates features that are errors within an ELF perspective.

<sup>28</sup> Italics to all the examples quoted are added.



It is perhaps obvious, but worth pointing out, that there is an expectation of a lower frequency of the non-standard features among NSs than among users of ELF or learners. If the reverse is true, there would be a question about the non-standardness of the features, as discussed in section 2.13.

## 2.16. The third person singular present tense -s ending.

### 2.16.1. Introduction: -s and zero.

The -s form of a verb (i.e. ending with an *s*) occurs in the present tense with a subject in the third person singular: ‘The basic grammatical rule is that the *s*-form of lexical verbs and the primary auxiliaries is used with a third person singular subject in the present tense indicative’ (Biber et al. 1999: 180), e.g. *he walks, she does, it has, he is*.<sup>29</sup> The primary auxiliary verbs are BE, DO and HAVE, and one of these, BE, has such subject-verb concord in the past tense as well as the present, e.g. *she was*.

The non-standard absence of the -s ending in the third person singular present tense – *he walk, she do* – is often referred to as ‘3<sup>rd</sup> person singular zero’, or ‘3<sup>rd</sup> person zero’ (Cogo and Dewey 2012: 49), or ‘3<sup>rd</sup>-person zero’ (Carey 2013). In this thesis the term for the concept will be THE 3<sup>RD</sup> PERSON ZERO. Instances of it are treated as countable, i.e. one 3<sup>rd</sup> person zero, two 3<sup>rd</sup> person zeroes, etc., so that there is no necessity to type ‘instances of the 3<sup>rd</sup> person zero’ whenever there is more than one. Other uses of ‘third’ are not abbreviated to ‘3<sup>rd</sup>’.

### 2.16.2. Concord in some constructions.

While it might seem a simple thing to identify 3<sup>rd</sup> person zeroes, for example when a speaker says *he walk* or *she do*, subject-verb concord is not entirely straightforward and there are problematic constructions. One example is the ‘coordinated noun phrase as subject’ (Hasselgård, Lysvåg, and Johansson 2012: 267), in which the subject is not a single noun phrase, for example, in the following sentence:

- 5        only one quarter of the people who take *it get* side effects. [BNC Spoken Context-governed, file HV1, excerpt from line 10.]

---

<sup>29</sup> The difference between LEXICAL and PRIMARY AUXILIARY VERBS is explained in section 4.1.1. INDICATIVE is ‘the mood category associated with an ordinary statement’ (Trask 2000: 70); it ‘represents an unmarked mood in opposition to a subjunctive, imperative, etc.’ (Matthews 2007: 190). SUBJUNCTIVE and IMPERATIVE are explained in section 2.16.3.

The verb takes the base form *get* because the subject is plural. Yet such a sentence showed up in a corpus search for 3<sup>rd</sup> person zeroes because *it* appears next to *get*. Therefore in a corpus investigation it becomes important to read through apparent hits for 3<sup>rd</sup> person zeroes to verify that each one is genuine.

Concord with collective nouns is less clear. A collective noun can have a UNIT READING, with a singular verb, e.g. *family* can be treated a unit:

- 6        Our family *has* been traced back to the 15<sup>th</sup> century. (Hasselgård, Lysvåg, and Johansson 2012: 269. Italics in original.)

Or, a collective noun can have a DISTRIBUTIVE READING, with a plural verb, ‘where the focus is on the members making up the group’ (Hasselgård, Lysvåg, and Johansson, 2012: 96), e.g. *family* treated as individual members:

- 7        My family *are* (all) perfectly normal. (Hasselgård, Lysvåg, and Johansson 2012: 269. Italics in original.)

So the concord with a collective noun can be either singular or plural, for example, *the government pays and pays and pays* can be

- 8        [the] *government pay* and pay and pay [VOICE, file Edwgd241, excerpt from line 927.]

because both concord variations are found in standard English, especially British English (Biber et al. 1999: 188). The example *government pay and pay and pay* cannot be considered a 3<sup>rd</sup> person zero because it is not an example of an *s* being absent that would otherwise occur in standard English. However, in the corpus investigation, I did find collective nouns as subjects to verbs that I considered to be 3<sup>rd</sup> person zeroes:

- 9        when *one party go* to the elections [VOICE, file POwsd372, excerpt from line 716.]
- 10       if every time that *the government change* you have everything changed [VOICE, file Edwsd499, excerpt from line 408.]

It is the case that ‘[f]or plural concord to be available, the meaning of the verb must clearly be applicable to individual members of the group’ (Biber et al. 1999: 189), and in my view this is not so in these two examples. A *party* goes to an election as a single entity, therefore there is a unit reading, and a *government* changes as a single entity, also a unit reading, so the subject-verb concord should be singular in both instances.

Nations are collective nouns that have unit readings too, so

11        *norway* definitely *share* sweden's er ambitions [VOICE, file POprc559, excerpt from line 9.]

is also a 3<sup>rd</sup> person zero – but it would not have been if the reference had been to a sports team, which can have a distributive reading in British English. It was a reference to the country in a ‘press conference on the EU-Norway energy partnership dialogue’.<sup>30</sup>

### 2.16.3. Other uses of the base form.

It is also important to remember while searching for 3<sup>rd</sup> person zeroes that there are moods in the present tense in which the *-s* form of the verb is not used with the third person singular. Among the base forms of lexical verbs, the IMPERATIVE and the SUBJUNCTIVE can be found,<sup>31</sup> and need to be identified, so that they are not mistaken for 3<sup>rd</sup> person zeroes.

The imperative ‘is used for commands and related communicative functions’ (Hasselgård, Lysvåg, and Johansson 2012: 183), and

12        okay *everybody write* down their five values [VOICE, file EDwsd302, excerpt from line 120.]

is not a 3<sup>rd</sup> person zero because the context indicates that it is a command. The subjunctive can occur ‘in *that*-clauses after verbs, adjectives, and nouns that express recommendations, requests, suggestions, etc.’ (the mandative subjunctive), and ‘in subordinate clauses introduced by *if*, *though*, *as if*, and *as though*’ (the hypothetical subjunctive) (Hasselgård, Lysvåg, and Johansson 2012: 183). An example of a speaker using the subjunctive is

13        But er Doctor [gap:name] had suggested to Jimmy that erm *he try* the new home this Friday [BNC Spoken Demographic component, file KB8, line 5141, complete.]

It can be seen that *try* does not have to be *tries* and is thus not a 3<sup>rd</sup> person zero. An example from VOICE was a little harder to spot:

14        my idea preconceived whatever was that the manual be also very concrete er er if I'm er er an ... academic er in some university of course i can i have to make the plan plan in my head what do we have what do we want and so on but also *that the manual provide* er very very concrete advice concrete advice [VOICE, file POWgd243, excerpts from lines 319 and 321.<sup>32</sup>]

---

<sup>30</sup> The header information given in the xml and html versions of the POprc559 file.

<sup>31</sup> In the BNC, the tag VVB is described as ‘The finite base form of lexical verbs (e.g. *forget*, *send*, *live*, *return*)’ and the tagset notes that VVB includes ‘the imperative and present subjunctive’, explicitly identifying the moods that are found with the base form (the BNC basic tagset, at <<http://ucrel.lancs.ac.uk/bnc2/bnc2guide.htm#tagset>>).

<sup>32</sup> The quote begins after line 319 starts and finish before 321 ends. The excluded line 320 is back-channelling from another speaker.

#### 2.16.4. The 3<sup>rd</sup> person zero and ELF.

The 3<sup>rd</sup> person zero has already come up in some of the ELF literature that I have already mentioned. Three authors mentioning it were covered in section 2.9, Schneider, Jenkins, and Mauranen. Schneider's hypothesis about there being cognitive processes in common between ELF and ESL means that stable ELF interaction could produce linguistic features familiar from ESLs, for example the absence of morphological markers, like *-s* endings (Schneider 2012: 64). Schneider refers specifically to the 3<sup>rd</sup> person zero in this context (Schneider 2012: 64, 69), seeing 'a fully regular, uninflected pattern' for verb forms as 'a cognitive advantage' (Schneider 2012: 69). Jenkins speculates that the loss of the *-s* might be a 'natural' continuation of the long-term process of the loss of English present tense verb endings (Jenkins 2009a: 149), therefore a process existing within ENL that could spread to ELF. Mauranen speculates about the future loss of the *-s* due to the process of levelling, in the context of contact-induced language change (Mauranen 2012: 32), presumably via ELF.

Breiteneder (2009) was also mentioned in passing (section 2.11), in reference to claims that non-standard forms are shared by speakers in VOICE. Breiteneder's study specifically concerns the 3<sup>rd</sup> person zero, claiming that it is a 'symptomatic' feature of ELF (Breiteneder 2009: 258). Using the pre-release version of VOICE, 43,000 transcribed words, she found 151 third person present tense singular verb forms (of main verbs), 126 with the *-s* ending and 25 3<sup>rd</sup> person zeroes (Breiteneder 2009: 259).<sup>33</sup> This is a high percentage of 3<sup>rd</sup> person zeroes, about 16.56% of the third person present tense singular verb forms, but both that percentage and Breiteneder's data seem too small to really call the 3<sup>rd</sup> person zero 'symptomatic' of ELF.

An earlier study by Breiteneder (2005) involved 'a small-scale EELF [English as a European Lingua Franca] corpus of about 50,000 words, equalling 3.75 hours of recorded conversation', and it consisted of 'working group discussions between representatives of the EU government and national agencies of higher education' (Breiteneder 2005: 6). Here the percentage of 3<sup>rd</sup> person zeroes was higher than the other study. Of 141 third person singular present tense forms (of main verbs),<sup>34</sup> there were 112 *-s* endings, and 29 were 3<sup>rd</sup> person zeroes, which, as Breiteneder states, is 20.57% (Breiteneder 2005: 8). Breiteneder's conclusion, while focusing on the 79.43%

---

<sup>33</sup> A MAIN VERB is 'the head of a verb phrase (always a lexical verb)' (Hasselgård 2012) (LEXICAL VERBS are defined in section 4.1.1). It is implied in Breiteneder's study that the 151 did not include the subjunctive, etc., which would be expected. Breiteneder later reduced the figure of 126 *-s* endings to 88 by removing instances where the verbs formed parts of prefabricated chunks, and instances where one speaker was repeating another (Breiteneder 2009: 259-261).

<sup>34</sup> Again it is implied that she did not include the subjunctive, etc.

‘normative pull of the standard norms’, theorizes about the 20.57% regularization of the ‘irregular nature of the present tense verb morphology of Standard English’ (Breiteneder 2005: 22), as a ‘common EELF strategy’ (Breiteneder 2005: 23). Again, the dataset seems too small to provide grounds for speculation about what is ‘common’.

Referring to Breiteneder (2005), Cogo and Dewey write of the 3<sup>rd</sup> person zero as ‘a well-documented aspect of ELF interactions’ (Cogo and Dewey 2012: 49), and Dewey’s study has even more remarkable findings than Breiteneder’s. Dewey’s study (discussed in Cogo and Dewey 2006, and Cogo and Dewey 2012, but not widely available) identifies the 3<sup>rd</sup> person zero as ‘particularly widespread’ (Cogo and Dewey 2012: 49). The dataset

comprises 42 different communicative events, ranging from informal entirely unplanned conversations to formal seminar presentations, with a heavy bias towards naturally occurring non-institutional interactions. 38 of these communicative events have been fully transcribed, totalling approximately 8 hours in duration. The participants number 55 and between them there are 17 first languages represented (Cogo and Dewey 2006: 63).

The fifty-five participants were international students, London-based non-native speakers of English (Cogo and Dewey 2012: 40). The total number of transcribed words was 61,234 (Carey 2013a). In the study, excluding auxiliary verbs and just looking at lexical verbs,<sup>35</sup> 108 out of 211 third person singular present tense verb endings are 3<sup>rd</sup> person zeroes, which is about 51.18% of them (Cogo and Dewey 2006: 77), which leads Cogo and Dewey to write that ‘at least in certain types of ELF settings, [the] 3<sup>rd</sup> person zero appears to be emerging as the default option’ (Cogo and Dewey 2012: 49).

Mortensen criticizes this statement by Cogo and Dewey (Mortensen 2013: 31). While Cogo and Dewey ‘would argue’ that ELF cannot ‘be considered a language variety or even a group of varieties in the traditional sense of the notion’ (Jenkins, Cogo, and Dewey 2011: 296), for Mortensen their claims about the 3<sup>rd</sup> person zero show that ‘conceptualizations’ of ELF as a variety of English ‘linger prominently – if implicitly – in the field’ (Mortensen 2013: 30). Mortensen cites Breiteneder’s 2005 and 2009 studies as ‘evidence to the contrary from other ELF settings’ that Cogo and Dewey cannot show the 3<sup>rd</sup> person zero to be emerging as the default option (Mortensen 2013: 32), and indeed in the Breiteneder studies, it is not.

In the ELFA project blog (Carey 2013a), Carey supports Mortensen’s argument by highlighting the ‘small size of Dewey’s corpus’, and finds the ‘[b]ig conclusions from a small database’

---

<sup>35</sup> The difference is explained in section 4.1.

troubling. Carey puts forward VOICE, with over a million words,<sup>36</sup> as a ‘meaningful dataset’, and finds in VOICE 5,335 lexical verbs ‘functioning<sup>37</sup> as 3<sup>rd</sup>-person singular’. 310 of these

have a non-matching form tag, almost all of these being the famous 3<sup>rd</sup>-person zero. Unfortunately for Dewey’s claims of 3<sup>rd</sup>-person zero ‘winning this competition’, these 310 cases amount to 5.8% of verbs functioning as 3<sup>rd</sup>-person singular – a very long way from Dewey’s finding of 52% (Carey 2013*a*).

In a later ELFA project blog entry (Carey 2013*b*), Carey examined these findings further. He found the 3<sup>rd</sup> person zero in 102 of the 151 speech events of VOICE (i.e. in 68% of them), therefore ‘widespread’, but he did not find it ‘especially prominent in any individual domain’ (leisure, or business, etc.) or any particular event type (conversation, or interview, etc.). Neither could he find much difference in the use of the 3<sup>rd</sup> person zero between speakers of different L1s. He did, however, notice that NSs used 3<sup>rd</sup> person zeroes as much as German and Dutch speakers of English did.

In this thesis, 3<sup>rd</sup> person zeroes in VOICE are examined in more detail than in Carey’s blog, and also the ELF dataset will be double the size because ELFA is examined too.

On the subject of NSs using 3<sup>rd</sup> person zeroes, this thesis examines an NS corpus (the BNC). Britain (2010) paints a picture of the 3<sup>rd</sup> person zero in England:

in East Anglia present tense verbs traditionally lack any verbal marking at all, even in third-person singular contexts... in the south west... however... this non-standard form appears to be undergoing attrition... zero [is found] on the decline across apparent time in rural and urban Norfolk and Suffolk, though the attrition seems to be more marked, perhaps surprisingly, in rural parts of the region. Zero marking is also occasionally found in third-person singular contexts in the south west... (Britain 2010: 40).

From this it appears that the 3<sup>rd</sup> person zero is declining, except in East Anglia. Regional diversity in the use of the 3<sup>rd</sup> person zero can thus be expected in an NS corpus with data from England. However, as mentioned in section 2.13, there are gaps in linguists’ knowledge about this.

Chapter 4 reports on the corpus investigation of the 3<sup>rd</sup> person zero.

## **2.17. The relative pronouns *who* and *which*.**

### **2.17.1. Relative pronouns.**

---

<sup>36</sup> See section 3.2.1 regarding the number of words in VOICE.

<sup>37</sup> Word tokens in VOICE have two part-of-speech tags, one for function and one for form. See section 3.2.1.

A relative pronoun has been defined as a ‘pronoun which introduces a relative clause’ (Trask 2000: 118). In English, the relative pronouns are *who*, *whom*, *which*, and sometimes *that*. There are also ‘zero relativizers’, for example, *I thought of a girl I used to know called Louise* (Biber et al. 1999: 613), but zero relativizers cannot always be used, and the use of a relative pronoun can be obligatory, for instance, in this sentence: *The settlers who jumped the gun in Oklahoma grabbed the best land* (Trask 2000: 118), because it is the subject of the relative clause. This thesis is interested in all occasions when the relative pronouns *who* and *which* are used, not only when they are obligatory. The main focus is on the use of *who* or *which* in each other’s place.

In the corpus investigation, instances of both standard and non-standard usage of *who* and *which* as relative pronouns are counted numerically, to work out the frequency of their occurrence. The individual instances I term ‘uses’. For instance, twenty-one non-standard uses of *which* are found in VOICE.

An important term in the study of relative pronouns is ANTECEDENT. ‘The antecedent of a relative pronoun or a relative clause is the noun phrase that the pronoun or the clause refers back to’ (Hasselgård 2012). The antecedent of the relative pronoun *who* in the above example is *The settlers*.

#### 2.17.2. *Who* and *which* as relative pronouns.

These examples illustrate the role of each of the two relative pronouns:

- 15      the kind of *person who* needs emotional space (Biber et al. 1999: 87.)
- 16      *the car which* she had abandoned (Biber et al. 1999: 87.)

The relative pronoun *who* is used with an ANIMATE antecedent. It ‘is distinctive in that it is used almost exclusively with an animate (human) head’ (Biber et al. 1999: 612), or if not human, ‘a pet animal associated with personality’ (Hasselgård, Lysvåg, and Johansson 2012: 321), or ‘creatures in the supernatural world (angels, elves, etc) which are thought of as having human characteristics such as speech’ (Quirk et al. 1985: 1245). In the corpus investigation, I encountered examples, like the one below, of other animals (ducks, squirrels, drowned ewes, etc.) that were personified in the same way as a pet, and I accepted these as standard, for example:

- 17      little *duck who* was out the water and there's a piece of bread, honest to god this big thing come running over like this and she come running down to me like mummy a big duck's coming after you, they're coming [BNC Spoken Demographic, file KCM, line 960, complete.]

The relative pronoun *which* is used with an INANIMATE antecedent. It is at ‘the other extreme’ to *who*, and ‘rarely occurs with an animate head’ (Biber et al. 1999: 613). An interesting exception is ‘human babies... regarded (though rarely perhaps by their parents) as not having developed personality’ (Quirk et al. 1985: 1245), for example:

- 18 This is the baby *which* needs inoculation. (Quirk et al. 1985: 1245.)

In these cases, *which* can be used with *baby/ies*, *child(ren)*, and *infant(s)*. I found examples during the corpus investigation, such as this one:

- 19 xx for a *child which* has six years all this is a bit difficult [VOICE, file EDwgd305, line 513, complete.]<sup>38</sup>

*Which* can also refer to an animate noun when *which* ‘is a complement with the semantic role of characterization attribute’ (Quirk et al. 1985: 1245), for example:

- 20 He imagined himself to be an artist, *which* he was not (Quirk et al. 1985: 1245.)

Again, this was something encountered in the corpus investigation, e.g.

- 21 then on the portrait she's a beautiful woman *which* she's not . (er) in the reality . [LINDSEI, file FR027, excerpt from sentence.]<sup>39</sup>

When the antecedent is mixed animate and inanimate, the ‘principle of proximity seems to be favoured’ (Quirk et al. 1985: 1246) for deciding whether *who* or *which* is used, for example:

- 22 the people and things *which* amuse her most (Quirk et al. 1985: 1246. Italics in original.)

- 23 the things and people *who* amuse her most (Quirk et al. 1985: 1246. Italics in original.)

Apart from animacy, *which* ‘can also refer to a whole clause, in which case it introduces a sentential relative clause’, e.g.

- 24 It started raining, *which* was a good thing under the circumstances (Hasselgård, Lysvåg, and Johansson 2012: 147. Italics in original.)

In the corpus investigation, the relative pronouns *who* and *which* are considered standard or non-standard on the basis of the antecedent. These uses are standard:

- 25 imagine you have *an addressee who* is not at the end of the day with the project [VOICE, file POWgd243, excerpt from line 255.]

<sup>38</sup> In the tagged version of VOICE, xx in this line is tagged UNI, which means unintelligible speech.

<sup>39</sup> There are no line numbers in LINDSEI. Excerpts are often quoted, rather than full sentences, because of their length. The parentheses represent ‘filled pauses and backchannelling’, and a dot with a space on either side represents a pause of less than one second (LINDSEI handbook 2010: 14).



- 26 the most er important piece of er legislation is *the gender equality act which* is almost like the constitutional law but it's not constitutional law [ELFA, file CPRE09A, excerpt from sentence.]

Non-standard usage would be *an addressee which* and *the gender equality act who*.

This thesis focuses on the confusion, or to use a more neutral term, interchange, of *who* and *which*. The verb following the relative pronoun is not under investigation. Hence, *artists who is* and *the diversity which are* are counted among the standard uses, the sought-for non-standard being only the non-standard use of the relative pronoun with its antecedent. This means that when a construction was encountered in which the relative pronoun is used in a standard way, while the verb is not, it was counted as standard:

- 27 yeah (em) on the first picture . it's (em) he it's an *artists who* is painting a portrait of a woman [LINDSEI, file SW027, complete sentence.]
- 28 it's the *diversity* of the component *which are* erm er added [ELFA, file USEMP140, excerpt from sentence.]

#### 2.17.3. Collective nouns with relative pronouns.

Collective nouns can take either *who* or *which*, depending on the reading (see section 2.16.2). A distributive reading of the noun takes an animate relative pronoun, and a unit reading takes an inanimate relative pronoun, as can be seen, respectively, in these examples:

- 29 The committee *who were* responsible for this decision... (Quirk et al. 1985: 1246.)
- 30 The committee *which was* responsible for this decision... (Quirk et al. 1985: 1246.)

#### 2.17.4. Some other uses of *who* and *which*.

In the corpus investigation, I had to be careful to exclude the uses of *who* and *which* as interrogative pronouns, for example:

- 31 I don't give a sod *who* it is! [BNC Spoken Demographic, file KCF, line 2578, complete.]

Also, *which* can be used as an interrogative determiner, for example:

- 32 DNA tests determine *which* child belongs to *which* woman (Hasselgård, Lysvåg, and Johansson 2012: 134. Italics in original.)

#### 2.17.5. The relative pronouns *who* and *which*, and ELF.

In Björkman's ELF setting (described in section 2.3), 'the relative pronouns *which* and *who* used interchangeably, i.e. *which* used for people and *who* used for non-living things', appear in her data, but she does not consider the non-standard usage to be 'sufficiently frequent to be included in the list of commonalities', and no examples are given in her book as a result (Björkman 2013: 142), which instead focuses on other examples of non-standardness. This is an indication that the interchange of *who* and *which* cannot be predicted for an ELF situation.

Non-standard relative pronoun usage was identified in Dewey's study (described in section 2.16.4). Dewey describes 'several cases... where pronoun use in relative clauses differs markedly from established norms' (Cogo and Dewey 2012: 73). Cogo and Dewey provide examples from the data.

- 33      two months ago and I research *Bush*, *which* is the father Bush hm hm not the (Cogo and Dewey 2012: 74.)

In this example, the non-standard *which* is used instead of the standard *who*, when the antecedent is the animate noun *Bush* (a proper noun). In the next examples, there are 'collective antecedents' (Cogo and Dewey 2012: 74): the first two are collective nouns (see section 2.17.3) and the third is a demonstrative pronoun.

- 34      of identity in a bilingual *community* which will be the second generation of (Cogo and Dewey 2012: 74.)
- 35      aliens but: the second *generation* which is actually born and raised in (Cogo and Dewey 2012: 74.)
- 36      learners (,) in english resemble *those* which are the most frequent ones in (,) (Cogo and Dewey 2012: 74.)

In these cases, '*who* and *which* are both permitted', thus the speaker has a choice (Cogo and Dewey 2012: 74). By 'both permitted' Cogo and Dewey must be referring to distributive versus unit readings (see sections 2.16.2 and 2.17.3). They state that '[i]n such cases in ELF it seems the emergent trend is towards a preference for the *which* pronoun' (Cogo and Dewey 2012: 74). This statement is problematic. Given the small size of the dataset (see section 2.16.4), Cogo and Dewey are most likely overstating the case for any 'emergent trend'. This thesis will have the opportunity to look at such instances in a much larger dataset (VOICE and ELFA) and see whether there is a preference for *which* with 'collective antecedents' in the ELF corpora or not.

The results from the ELF corpora will be compared with the results from an NS corpus (the BNC). As all of this is spoken data, it is worth remembering that the spoken NS data is not necessarily going to keep to the written ENL standard (see section 2.13). Some variation is expected. Relevant to the non-standard usage in question, Britain writes that in spoken English, '[v]ariation is endemic in the relativization system' (Britain 2010: 49). Within this grammatical variation, depending on the spoken dialect, Britain observes that *who* can be replaced with *what* or *that* in a sentence like

37        Becky shouted at the bloke *who* spilt his drink on her dress (Britain 2010: 49.)

Yet no mention is made by Britain of *who* and *which* replacing each other. My working hypothesis is that there is unlikely to be interchange between *who* and *which* in the BNC.

The corpus investigation of the relative pronouns *who* and *which* is reported on in chapter 5.

## **Chapter 3. Data and methods.**

### **3.1. Corpus linguistics.**

This thesis reports a corpus investigation, and a CORPUS (plural CORPORA) can be defined as a

collection of linguistic data, either written texts or a transcription of recorded speech, which can be used as a starting-point of linguistic description or a means of verifying hypotheses about a language (corpus linguistics). (Crystal (ed.) 2003: 112).

There are four corpora examined in this thesis. Two represent ELF, one compiled in Vienna, and one in Helsinki (sections 3.2 and 3.3); one corpus represents native speech, specifically current British English, compiled in Britain (3.4); and the fourth corpus represents learner language, compiled in eleven different nations (3.5). It is important to note regarding the ELF corpora that

the fact that ELF research has been conducted in particular geographical locations should not be taken to mean that the research conducted IN a specific location necessarily relates to the English OF that location. The whole point about ELF is that it is a multilingual activity involving speakers who have come together from a range of different geographical regions (Jenkins, Cogo, and Dewey 2011: 285).

### **3.2. VOICE.**

#### **3.2.1. General information about VOICE.**

The Vienna-Oxford International Corpus of English (VOICE) version 2.0 (2013) (the first version was online in 2009) is the first of the two ELF corpora used. It was compiled at the Department of English at the University of Vienna, with a contribution from Oxford University Press. It is a spoken corpus. In this investigation, searches were conducted of the VOICE tagged for part-of-speech (POS), while examples presented in this thesis are quoted from VOICE untagged. VOICE consists of transcriptions of audio, recorded between 2001 and 2007, which is ‘151 naturally-occurring, non-scripted, face-to-face interactions involving 753 identified individuals from 49 different first language backgrounds using English as a lingua franca’ (VOICE Corpus Information page).

It is stated on the VOICE Corpus Information page that the corpus consists of ‘1,023,082 orthographically defined words’, but information is not given for how that figure is arrived at. Elsewhere, the word count for version 2.0 is given as 1,023,196 (VOICE, Statistics VOICE 2.0 Online: 1 Total numbers). There is a further discrepancy between those figures and the individual figures given for event types and domains in VOICE, both of which add up to 1,023,187

(VOICE, Statistics VOICE 2.0 Online: 4 Domains and Speech event types). In this thesis, the statistics for L1s are used (VOICE, Statistics VOICE 2.0 Online: 2 First languages), but neither of the given total word counts are. The total word count quoted in this thesis was calculated using WordSmith. The count was undertaken by selecting the untagged text files of VOICE. Using the WordList tool, I clicked the 'Make a word list now' button, and then the 'statistics' tab to view the 'tokens (running words) in text' column. This gave me the figure 1,320,311.

The event type and domain of a VOICE file are given in its title, e.g. 'EDcon4' contains the information that the domain is 'ED' (educational) and the event is a 'con' (conversation).

The POS tagging of VOICE is rather useful. There is a double POS tag, one code for the form of a word and another for its function. Having these two POS tags makes non-standard forms easy to find. For example, V is the base form of a verb, and VVZ is the tag for the third person singular present tense; it means there is a specific tag for the 3<sup>rd</sup> person zero, V(VVZ), the base form functioning as the third person singular present tense.

### 3.2.2. Obtaining L1s from VOICE.

Once hits were obtained from VOICE with the concordancer (WordSmith, see section 3.6), there was a process for obtaining the L1 of the speaker of the language of each hit. WordSmith showed which VOICE file each hit came from. I opened the VOICE text file, in which I could see the speaker ID for each line of text, e.g. 'S1'. Then I opened the equivalent xml file, and looked up the header information for e.g. 'S1', and found the L1 information, e.g. 'ita' (Italian). The abbreviation 'ita' is an example of the ISO 639-2 Language Codes being used. The codes can be viewed at <[http://www.loc.gov/standards/iso639-2/php/code\\_list.php](http://www.loc.gov/standards/iso639-2/php/code_list.php)>, with changes listed at <[http://www.loc.gov/standards/iso639-2/php/code\\_changes.php](http://www.loc.gov/standards/iso639-2/php/code_changes.php)> (NB for Croatian and Serbian).

### 3.2.3. Event types in VOICE.

Event types in VOICE are called 'Speech event types', and they are defined on the VOICE Corpus Information page, e.g. 'conversation' is defined as 'a speech event at which people interact without a predefined purpose'. There are ten event types, and unfortunately there is not enough space to reproduce the ten definitions here.

It was decided to simplify the analysis of event types by making them up into five categories. It did not seem necessary, for instance, to distinguish between the various types of 'discussion' for this thesis, which is more concerned with the comparison of corpora with each other than the

internal nuances of similar event types within a corpus. The five categories of event type, which become the five event types for VOICE in this thesis, are: Conversation; Discussion; Interview / Press conference / Question-answer session; Meeting; and Service encounter. The third of these is obviously three event types in one. What is less evident is that I folded the event type ‘panel’ and the three types of ‘discussion’ into Discussion.

#### 3.2.4. Domains in VOICE

Domains in VOICE are defined on the VOICE Corpus Information page, e.g. ‘Professional organizational’ is defined as including ‘all social situations connected with activities of international organizations or networks which are not doing research or business’. There are five domains, and unfortunately there is not enough space to reproduce the five definitions here. The domains are: Educational, Leisure, Professional business, Professional organizational, and Professional research and science.

### 3.3. ELFA.

#### 3.3.1. General information about ELFA

The English as a Lingua Franca in Academic settings (ELFA) corpus (2008) is the second of two ELF corpora used. It was compiled by the ELFA project at the University of Helsinki. It is a spoken corpus. In this investigation, searches were conducted of ELFA tagged for POS by me using the CLAWS7 tagger (see section 3.7), while examples presented in this thesis are quoted from the untagged ELFA files. ELFA consists of 165 files of ‘transcribed spoken academic ELF’ events (ELFA, Description of the ELFA corpus project). ‘As a general principle, all data in the corpus is authentic in the sense that it is not elicited for research purposes but occurs naturally’ (ELFA, Description of the ELFA corpus project). The speakers ‘represent a wide range of first language backgrounds as the data comprises approximately 650 speakers with 51 different first languages from several continents’ (ELFA, Description of the ELFA corpus project).

The ELFA project does not intend to give an official word count for the corpus because there is no universally accepted way of counting words. A word count should *not* be calculated from the L1 list (ELFA, First languages represented in the ELFA corpus; see also section 2.1, note 6) because ‘[w]hen a speaker has reported more than one first language, that speaker’s tokens have been counted under each of those languages’ (ELFA, First languages represented in the ELFA corpus). The total word count quoted in this thesis was calculated using WordSmith in the same

way as it was done for VOICE (section 3.2.1.). WordSmith gave the number of ‘tokens (running words) in text’ in ELFA as being 1,037,197.

The event type of each ELFA file is included in its title. For example, ‘CDIS01A’ contains the information that the event type is ‘CDIS’ (conference discussion). All of ELFA is in the educational domain.

### 3.3.2. Obtaining L1s in ELFA.

Once hits were obtained from ELFA with the concordancer (WordSmith, see section 3.6), there was a process for obtaining the L1 of the speaker of the language of each hit. WordSmith showed which ELFA file each hit came from, so I opened the ELFA text file in question. The lines in ELFA files are not numbered, but once I found within the file the text from the hit, I could see the speaker ID of who spoke it, e.g. ‘S1’. I could then read the header information for the file, and see that the speaker, e.g. ‘S1’, has e.g. ‘NATIVE-SPEAKER STATUS: Portuguese’, which means the speaker’s L1 is Portuguese.

### 3.3.3. Event types in ELFA.

The twelve event types are visible in the ‘ELFA\_index.xls’ file that comes with the corpus. As with VOICE (section 3.2.3), it was decided to simplify the analysis of event types by making them up into larger categories, in this case three categories. Once again it did not seem necessary to distinguish between various types of ‘discussion’, for example. This thesis is more concerned with the comparison of corpora with each other than the internal nuances of similar event types within a corpus. The three groups, which became the three event types for ELFA in this thesis, are: Discussion (conference discussion, doctoral defence discussion, lecture discussion, seminar discussion, plus the ‘UOTH010’ file, which is a panel discussion); Lecture; and Presentation (conference presentation, doctoral defence presentation, and seminar presentation).

## 3.4. The BNC.

### 3.4.1. Native speaker (NS) baseline data.

Firth and Wagner, as part of their critique of the conception of a foreign language speaker ‘as a deficient communicator... striving to reach the “target” competence of an idealized NS’ (Firth and Wagner 1997: 295-6) (see section 2.8), question the notion of comparing non-native speech to an NS baseline ‘on a tendentious assumption that NSs represent a homogeneous entity’, when all interactions are ‘related to the interactants’ local agenda, the social and institutional identities

that are made relevant and instantiated in the actual encounter and, not least, the demands and contingencies that become relevant in the minutiae of the talk itself' (Firth & Wagner 1997: 294). Ranta agrees that 'native speech is not a yardstick against which ELF speakers' speech is evaluated (as it is in SLA)', but defends using it, 'as long as the purpose is non-evaluative' (Ranta 2009: 88). As baseline data, it can show differences or similarities between native speech and ELF. The British National Corpus (BNC) is the corpus chosen to represent NS English in this thesis.

### 3.4.2. General information about the BNC.

The BNC is a 'collection of samples of written and spoken language from a wide range of sources. It was put together to represent a wide cross-section of current British English' (Hoffmann et al. 2008: 4). It was compiled and is managed by the BNC Consortium, led by Oxford University Press. The first edition was completed in 1994, and I used version 4.0 (2007). I used it with *BNCweb* (CQP-Edition), a web-based interface.

Apart from one small part of the investigation in which the written material of the BNC was searched (section 4.3.4), this investigation involves the spoken material of the BNC, which comes in two 'components'. This spoken material is referred to as the 'BNC Spoken components' throughout the thesis. On *BNCweb*, the two components are referred to as 'Spoken demographic' and 'Spoken context-governed'. The first is 'known as the Demographically sampled component... made up of conversations between the recruited respondents and a number of different people with whom they talked' (Hoffmann et al. 2008: 32). The second is 'known as the Context-governed component' and consists of 'material that was collected in particular settings or contexts' (Hoffmann et al. 2008: 33), which can be understood from the event types (see section 3.4.3).

The BNC states with the hits for each search (or the 'matches' for each 'query', in its own terminology) how many words it has searched. From this it can be seen that the BNC is a corpus of 98,313,429 words. The Written component is 87,903,571 words. The Spoken Demographic component is 4,233,962 words (but see section 3.4.3). The Spoken Context-governed component is 6,175,896 words. Both Spoken components are 10,409,858 words.

### 3.4.3. Event types, domains, and regions in the BNC.

The header information for each BNC file gives pertinent contextual information, such as event types, domains, and the region 'where spoken text was captured' (as it states). Event types are



called ‘genre classifications’ in the BNC. A list of genre classifications for the texts of the BNC are given online (Burnard (ed.) 2007: section 9.6, Table 37). These are mostly self-explanatory, for example ‘S brdcast discussn’ means ‘spoken, broadcast discussion’. The title of one genre is a little ambiguous, ‘S demonstratn’, but it means a ‘demonstration’ in the sense of a practical exhibition or explanation, of first aid for instance, or flower-arranging.

In terms of event types in the Spoken components, the Demographic component consists of ‘S conv’ (which I refer to as the Conversation event type) and the Context-governed component consists of all the other ‘S’ (spoken) event types. There is a discrepancy between the number of words given for the Spoken Demographic component when a search is run on *BNCweb*, 4,233,962, and the number of words given for the Spoken Demographic component by Burnard, and again for the Conversation event type by Burnard, 4,233,955 (Burnard (ed.) 2007: section 1.3, Table 1, and section 9.6, Table 37), for which I have not found an explanation.

No domain is given for the Demographic component. The Context-governed component is divided into four domains: Business, which includes ‘company talks and interviews’ and ‘trade union talks’, etc.; Educational and Informative, which includes ‘lectures’ and ‘news commentaries’, etc.; Leisure, which includes ‘talks to clubs’ and ‘broadcast chat shows’, etc.; and Public or Institutional, which includes ‘political speeches’ and ‘legal proceeding[s]’, etc. (Hoffmann et al. 2008: 33, Table 3.4).

Regional information becomes important to this investigation in section 4.3.2. In the BNC guide book of Hoffmann et al. it is stated: ‘Where possible, the [spoken] material was collected in three regions: North (27%), South (45%), and Midlands (24%).’ It also states: ‘About 4% of the spoken material lacks information about where it was captured’ (Hoffmann et al. 2008: 35).

### **3.5. LINDSEI.**

#### **3.5.1. General information about LINDSEI.**

The Louvain International Database of Spoken English Interlanguage (LINDSEI) is the corpus chosen to represent learner language in this thesis. It was launched in 1995 by the Centre for English Corpus Linguistics at Université Catholique de Louvain. It is a spoken corpus. In this investigation, searches were conducted of LINDSEI tagged for POS by me using the CLAWS7 tagger (see section 3.7), while examples presented in this thesis are quoted from the untagged LINDSEI files (save the illustrative example 38 below).

LINDSEI consists of 554 texts, each one an ‘informal interview’ (LINDSEI handbook 2010: 3). Each interview consists of ‘a warming-up activity, in which learners were given a few minutes to talk about one of three set topics, a free informal discussion which was conceived as the main part of the interview, and a picture description’ (LINDSEI handbook 2010: 3). The word ‘database’ rather than ‘corpus’ is used in LINDSEI’s name because ‘LINDSEI contains data like picture descriptions which do not qualify as corpus data in the strict sense’ (LINDSEI handbook 2010: 6) because they are not ‘produced for real communicative purposes’ (LINDSEI handbook 2010: 6). Yet the position taken by LINDSEI is that ‘all the data contained in LINDSEI meet the criteria for learner corpora in the wide sense’ (LINDSEI handbook 2010: 6). The definition of corpus in section 3.1 above does not specify how naturally produced the language in a corpus should be; this thesis does not get involved in the discussion about criteria for what constitutes a corpus. LINDSEI is treated as a corpus.

The word count for LINDSEI is given as 1,079,681 (LINDSEI handbook 2010: 23, Table 6), but as with VOICE and ELFA, a word count for LINDSEI was undertaken using the WordList tool in WordSmith. The untagged text files of LINDSEI were used for this. The number of ‘tokens (running words) in text’ in LINDSEI calculated this way is 1,080,924. Neither word count is used in the thesis, however (see 3.5.2).

LINDSEI is all one event type, ‘informal interview’, as mentioned above. LINDSEI is all in the educational domain. The learners interviewed are ‘young adults (university undergraduates), advanced proficiency level, learners of English as a Foreign Language (EFL) rather than as a Second Language (ESL)’ (LINDSEI handbook 2010: 7). This description is elsewhere qualified by the statement that ‘the proficiency level in LINDSEI is best described as ranging from higher intermediate to advanced’ (LINDSEI handbook 2010: 10).

### 3.5.2. A and B turns in LINDSEI.

LINDSEI consists of both interviewer and interviewee speech, referred to as ‘A turns’ and ‘B turns’, respectively. The interviewers are sometimes NSs, sometimes not (LINDSEI handbook 2010: 12), but their speech (the A turns) cannot count as learner language. In my investigation I removed A turn speech from the hits of any searches I ran. I treated the total size of the corpus to be the B turns only. The word count for B turns in LINDSEI is given as 792,141 (LINDSEI handbook 2010: 25, Table 8) and this figure is quoted in the thesis.

### 3.5.3. L1s in LINDSEI.

LINDSEI is divided into eleven national subcorpora. There is a B-turns-only word count given for each subcorpus (LINDSEI handbook 2010: 25, Table 8), which made it possible to construct Tables 15 and 28 in the thesis (see sections 4.4.2 and 5.4.2).

There are thirteen different L1s among the speakers in the corpus: Arabic; Bulgarian; Chinese (neither the LINDSEI handbook, the ‘\_LINDSEI.mdb’ file, nor the interface software make it explicit that a ‘Chinese’ L1 means Mandarin. Indeed, only one of the ‘Chinese’ L1s specified Mandarin as the language spoken at home); Chinese (Cantonese); Dutch; French; German; Greek; Italian; Japanese; Polish; Spanish; and Swedish.

There are approximately 50 speakers per L1; the exact numbers are given in the ‘\_LINDSEI.mdb’ file. There are a total of 554 speakers; one speaker per interview; and one interview per file. Therefore there are 554 files. While there are 52 Chinese L1s, an additional speaker’s L1 is given as Chinese (Cantonese) (it can be seen by using LINDSEI’s interface software that the one file with the Chinese (Cantonese) L1 is ‘CH046’); all 53 files are designated ‘CH’. There is one Arabic L1 counted among the Spanish speakers (it can be seen by using LINDSEI’s interface software that the one file with the Arabic L1 is ‘SP029’). Apart from that, ‘the learner’s mother tongue coincides with the language of the subcorpus (Dutch for the Dutch subcorpus, Japanese for the Japanese subcorpus, etc)’ (LINDSEI handbook 2010: 36, note 7).

To make analysis manageable, I gathered the L1s into broad L1 groups: Balto-Slavic (Bulgarian and Polish, the ‘BG’ and ‘PL’ files); Germanic (Dutch, German, and Swedish, the ‘DU’, ‘GE’, and ‘SW’ files); and Romance (French, Italian, and Spanish, the ‘FR’, ‘IT’, and ‘SP’ files); while the rest stood alone as unrelated languages (Chinese, Greek, and Japanese, the ‘CH’, ‘GR’ and ‘JP’ files). The number of words in LINDSEI of each L1 group was calculated from the number of words per subcorpus (B turns only) given in the LINDSEI handbook (2010: 25, Table 8). The Cantonese L1 is included in the Chinese word count, but that worked conceptually for me as an L1 group. The Arabic L1 is included in the word count for the Spanish subcorpus, which I was not satisfied with. I copied the Arabic L1 speaker’s file, and deleted all the A turns from the copy. I then counted the number of word tokens in the B turns using the WordList feature of WordSmith. Finally, I subtracted this number (960) from the Spanish word count given by LINDSEI (64,804), to get 63,844, which is the figure that can be seen used in Table 15, note 127, and Table 28, note 183.

### **3.6. WordSmith 6 concordancer.**

The WordSmith 6 concordancer is a computer program, which I used to search the tagged versions of VOICE, ELFA, and LINDSEI (for the BNC, I used its own interface, *BNCweb*). To conduct searches, I used its ‘Concord’ feature, which involves choosing texts (i.e. corpora) and then running search strings for hits (see chapters 4 and 5 for my search strings). To calculate word counts, I used its ‘WordList’ feature.

### 3.7. The CLAWS7 tagger.

Neither ELFA nor LINDSEI are tagged, so for the purposes of this thesis all 165 ELFA files and all 554 LINDSEI files were tagged by me with CLAWS7, the web service (see References section for links to the free service and to the tagset). This gave me the advantage of being able to use the same search strings for ELFA and LINDSEI in the corpus investigation. However, even though the two corpora are of about equal size, tagging LINDSEI was a much greater undertaking than tagging ELFA because of the greater number of files. Each file had to be tagged individually, by pasting it into a field on the website. On average, 86 files can be tagged and saved per hour.

I would like to include the following paragraph as advice to other researchers, who ought to be aware that CLAWS7 should not be used with the concordancer AntConc. The first problem with AntConc is that it cannot search LINDSEI text files because they are Unicode 16 bit (UTF-16). AntConc is able to search UTF-8 text files, so software such as Text Encoding Converter v3.0 build 130827 Demo Version can be used (downloaded for free from [www.convertunicode.com](http://www.convertunicode.com), it can convert UTF-16 files to Unicode 8 bit (UTF-8), 5 files at a time, every 8 seconds), but a more serious problem is that some data tagged by CLAWS7 is not detected by AntConc because of the word wrap done automatically by CLAWS7. For example, there are three hits for *he does* in the B turns in LINDSEI file FR025, and AntConc only picks up on one of them. This is an example of what AntConc does not detect:

38      I\_PPIS1 ca\_VM n't\_XX believe\_VVI that\_CST because\_CS he\_PPIS1 he\_PPIS1  
          does\_VDZ n't\_XX care\_VVI .\_.  
          [LINDSEI file FR025, complete sentence.]

The search string is ‘he\_PPIS1 \*\_VDZ’ (see section 4.2.2), and AntConc cannot connect *he\_PPIS1* at the end of one line to *does\_VDZ* at the start of the next, as it would if they were on the same line. It does not have this problem with the tagged version of VOICE, so it must be a problem it has with CLAWS7. WordSmith has no problem working with CLAWS7.

### 3.8. Self-correction in spoken data.

When gathering data on non-standard features, the question arises of how to deal with instances when speakers correct their own non-standard speech as they talk. This occurred in all four corpora, and here is an example:

39       the the fairly elderly couple which, who started [BNC Spoken Context-governed, file HDY, line 41, complete.]

This shows that the speaker initially used *which*, then (presumably) realized the antecedent was animate, and self-corrected to *who*. The question for this investigation is whether or not to count this as non-standard usage of the relative pronoun *which*. The solution adopted for this thesis is to treat features as standard or non-standard on the basis of whether or not they appear in the PERFORMANCE, regardless of subsequent self-correction in that same performance. Performance was '[d]efined by Chomsky in the 1960s as "the actual use of language in concrete situations"' (Matthews 2007: 293). It

will contain features irrelevant to the abstract rule system, such as hesitations and unfinished structures, arising from the various psychological and social difficulties acting upon the speaker (Crystal (ed.) 2003: 343).

This means speech will not be treated as standard or non-standard on the basis of COMPETENCE, which refers

to speakers' knowledge of their language, the system of rules which they have mastered so that they are able to produce and understand an indefinite number of sentences, and to recognize grammatical mistakes and ambiguities. It is an idealized conception of language, which is seen as in opposition to the notion of performance... (Crystal (ed.) 2003: 87-8).

Example 39 above is a performance error but not a competence error. The decision not to exclude self-corrections from non-standard data is in line with the fact that my investigation is concerned primarily with performance.

Self-correction is not frequent in the data. For example, only 6 out of the 132 non-standard uses of the relative pronouns *who* and *which* found in chapter 5 are followed by self-correction (like example 39 above).



## Chapter 4. Corpus investigation of the 3<sup>rd</sup> person zero.

### 4.1. Introduction.

The 3<sup>rd</sup> person zero, the absence of the third person singular present tense *-s* ending,<sup>40</sup> for example *he look very sad*,<sup>41</sup> is introduced in chapter 2. This chapter involves the investigation of corpora for this non-standard form. I describe and compare the 3<sup>rd</sup> person zero in the ELF corpora, VOICE and ELFA (section 4.2); the native speaker (NS) corpus, the BNC (4.3); and the English as a Foreign Language (EFL) learner corpus, LINDSEI (4.4), all of which are introduced in chapter 3.

#### 4.1.1. Verbs that were included.

It was important to decide at the outset which verbs to include in the search. The candidates were LEXICAL VERBS and the PRIMARY AUXILIARY VERBS. Lexical verbs, ubiquitous and in their thousands, are often defined by what they are not, this definition for example: '[a]ny verb which is not an auxiliary... *run, smile, die, elope...*' (Trask 2000: 77). Auxiliary verbs, or 'helping verbs', are categorized as either primary or modal,<sup>42</sup> the latter not relevant here. The primary auxiliary verbs – BE, HAVE, and DO – 'are used to build up complex verb phrases' (Biber et al. 1999: 72). The search for the 3<sup>rd</sup> person zero is limited here to lexical verbs and one primary auxiliary verb, DO. VOICE is tagged specifically for the 3<sup>rd</sup> person zero of lexical verbs and DO. The other two primary auxiliaries, BE and HAVE, are not tagged in VOICE for the 3<sup>rd</sup> person zero, so it was possible to exclude them from this investigation. I thought that instances of the non-standard *are* would be rare in the corpora (e.g. *he are, she are, it are*), and would not add significantly to the number of 3<sup>rd</sup> person zeroes this was a reason to exclude BE. Also, it does not seem to me that the confusion of *is* and *are* could really be described as the dropping of an *s*, strictly speaking. HAVE was included at an early stage, in my searches for the 3<sup>rd</sup> person zero in VOICE, ELFA, and the BNC Spoken Demographic component, but for the work involved, there were few cases of *he have, she have* and *it have*, so investigating HAVE did not significantly add to the overall picture. Also, there is the question of whether an investigation of HAVE really produces something that

---

<sup>40</sup> Third person singular present tense *-s* endings will be abbreviated to '*-s* endings' during this chapter.

<sup>41</sup> Prodromou 2008: 31.

<sup>42</sup> Modal auxiliaries: CAN, COULD, WILL, WOULD, SHALL, SHOULD, MAY, MIGHT, MUST, and OUGHT (TO) (as listed in Trask 2000: 17). They do not take an *-s* ending in the third person singular.

fits the definition of what is being sought; to say, for example, *it have* instead of *it has* involves adding *-ve*, so it is more than simply the omission of an *-s*.

VOICE is unique, in that all the 3<sup>rd</sup> person zeroes within it can be detected because of the tagging. In other corpora examined, this cannot be done. Instead, 3<sup>rd</sup> person zeroes were obtained by searching for the pronouns *he*, *she*, and *it*, followed<sup>43</sup> by the base form of a verb.

#### 4.1.2. Data that were excluded for not being 3<sup>rd</sup> person zeroes.

As explained in 2.16, subject-verb concord is not always straightforward, which can also make identifying 3<sup>rd</sup> person zeroes complicated. From each of the corpora investigated, various hits that appeared to be 3<sup>rd</sup> person zeroes were not. There were amusing instances like proper nouns tagged as verbs (like *Sue*), but there is space here only to list the main difficulties. Any problematic constructions that were expected to be found were, as displayed in section 2.16.2 and 2.16.3 (the co-ordinated noun phrase as subject; plural concord with the distributive reading of a collective noun; the imperative; and the subjunctive mood). Pronouns in the first person not the third person were also encountered, usually through apparent mistranscription. The context strongly indicates *I* was mistranscribed as *it*:

40 but in the list there was melange and cappuccino separately so they make it differently *it guess*. [VOICE, file LEcon565, line 179, excerpt.]<sup>44</sup>

The infinitive form was also an issue, most often in questions.<sup>45</sup> The auxiliary DO (*does*) in this next example is omitted from the question, but it seems implied (*does anybody want*), therefore *want* appears in the infinitive.

41 thank you anybody *want* to react to this yeah. [VOICE, file EDwsd303, line 309, complete.]

Some hits were not 3<sup>rd</sup> person zeroes on the grounds of the pronoun and verb being in distinct syntactic units, for example:

42 and er let's keep on doing *it thank* you [ELFA, file CDIS08A, excerpt from sentence.]

---

<sup>43</sup> 'Followed' in the context of *he/she/it* means the verb directly followed the pronoun, e.g. *but most the time he speak english* [VOICE, file EDcon250, line 477, complete], and *idea that it comes after something* [ELFA, file CDIS01A, excerpt from sentence.]

<sup>44</sup> All indented examples in this chapter are numbered, and the first number in this chapter is 40. The italics are added in all examples. All examples from VOICE are quoted from the text files of the untagged version (VOICE2.0XML). The text files derived from the tagged version (VOICEPOSXML2.0) include, for example, indications of pauses between words, such as *\_0* which indicates a brief pause (explained in VOICE's README file).

<sup>45</sup> A straightforward example is *is she or he intimate* [ELFA, file USEMD03B, excerpt from sentence.]



It can be seen that in this example *it* is not the subject of *thank*. The words *thank you* are a polite insert (see Biber et al. 1999: 1083).

A particular problem with distinct syntactic units appears in the BNC. They appear to be anacolutha (defined in section 5.1.2), but they are something else. One can find that two different speakers or sentences have been joined on the ‘Query Results’ screen, but the ‘Corpus Display’ screen tells a different story. Example 43 shows the Corpus Display screen.

43      Elaine 2487 <-|-> He trains very, very <-|->  
           Unknown speaker 2488 <-|-> Snap!  
           Elaine 2489 well don't he Kevin?  
           Kevin 2490 <-|-> Yeah he <-|->  
           Unknown speaker 2491 <-|-> Snap!  
           Kevin 2492 I trained with <-|-> him <-|->.  
           [BNC Spoken Demographic, file KBC, lines 2487-2492, complete.]

One speaker says *Yeah he* and another says *Snap!*, which is misinterpreted on the Query Results screen as a single sentence, *Yeah he Snap!* It is a change of speaker, rather than an anacoluthon. One final set of exclusions I shall mention is quotations from John Milton’s poetry in a broadcast discussion. Whatever poetic licence allows grammatically, such quotes are deemed for this study to be written English, not spoken English, and are outside consideration.

44      Thou openest wisdom’s way and gives [unclear] no secret *she retire*. [BNC Spoken Context-governed, file KRH, line 4436, complete.]<sup>46</sup>

## 4.2. The ELF corpora, VOICE and ELFA.

### 4.2.1. The 3rd person zero in VOICE.

In the version of VOICE 2.0 tagged for part-of-speech, the 3<sup>rd</sup> person zero is specifically tagged V(VVZ).<sup>47</sup> This denotes V, the base form of a verb, with the function VVZ, third person singular present tense, presented in parentheses. Normally form matches function. For example, with the sequence of four words *he PP(PP) count V(VVZ) the DT(DT) weekend NN(NN)* [VOICE, file

<sup>46</sup> The lines of poetry are misquoted or mistranscribed. They are: *In ignorance; thou openest wisdom’s way / And giv’st access, though secret she retire* (from *Paradise Lost* Book 8).

<sup>47</sup> The VOICE tagset is provided in its README file.

EDwgd497, excerpt from line 689], the match between form and function can be seen in three of the words, while the mismatch can be seen in the second word. It has previously been found (Carey 2013a) that there are 310 cases of the 3<sup>rd</sup> person zero in VOICE, and that this is 5.8% of the third person singular present tense forms in VOICE. I did not rely on previous research, and performed a fresh search of VOICE for these forms, using WordSmith.<sup>48</sup>

As mentioned in section 4.1, the verb DO is not separately tagged in VOICE (as it is in some corpora), so for example, *he do*<sup>49</sup> was found among the 3<sup>rd</sup> person zeroes tagged V(VVZ), and the verb in *it does*<sup>50</sup> was tagged VVZ(VVZ). It was pleasing to find that contracted negatives such as *it do n't*<sup>51</sup> and *that does n't*<sup>52</sup> were among the hits. Since DO is to be included in the results, including the instances where it occurs as part of a contraction makes these results comprehensive.

The hits had to be checked for the accuracy of the tagging. A representative sample of 502 of the 5,025 hits for the search string 'VVZ(VVZ)' was examined (every tenth hit); the hits in the sample were correctly tagged, so I deemed all 5,025 to be -s endings.<sup>53</sup> Then an examination was undertaken of every one of the 290 hits I got for 'V(VVZ)'.<sup>54</sup> Typical 3rd person zeroes included:

45      okay let's say that *it* already *exist* or [VOICE, file POwgd378, line 100, complete.]

46      just like you say that *everybody* is so open and *talk* to you and i i consider them very friendly [VOICE, file EDsed31, excerpt from line 1640.]

Two extra 3<sup>rd</sup> person zeroes were discovered that are incorrectly tagged, bringing the total to 292. Firstly, the verb *go* in the following sentence should not have been tagged VVP(VVP):<sup>55</sup>

47      when one *party go* to the elections<sup>56</sup> [VOICE, file POwsd372, excerpt from line 716.]

Secondly, *shuffle* should not have been tagged VV(VV) in the following sentence:

---

<sup>48</sup> This concordancer is described in section 3.6.

<sup>49</sup> For example, in file LEcon329, line 266.

<sup>50</sup> For example, in file PBmtg463, line 2001.

<sup>51</sup> For example, in file EDwgd241, line 821.

<sup>52</sup> For example, in file EDcon521, line 1183.

<sup>53</sup> It did not matter for this study whether an -s ending itself was standard usage or not. For example, *yeah yeah i i knows m- m- most of the erasmus student here* [VOICE, file EDcon250, line 179, complete] is not standard, but is counted among the -s endings.

<sup>54</sup> This is fewer than Carey's 310 3<sup>rd</sup> person zeroes (in Carey 2013a).

<sup>55</sup> VVP is '[v]erbs other than be and have, present non-3rd person singular' – see note 47.

<sup>56</sup> Also see section 2.16.2 about the concord here: the collective noun *party* is a single entity, which requires a unit reading, so the verb should be singular.

48 i believe it was the thursday *freighter* out of Amsterdam makes a stop dubai hongkong in hongkong turn around *shuffle* around with the plane and then that's the dedicated plane [VOICE, file PBmtg300, excerpt from line 2272.]

Indeed, the verb *turn* is tagged V(VVZ), that is, as a 3<sup>rd</sup> person zero, so the verb *shuffle* should have been too. Despite these extra discoveries, 32 hits had to be excluded for not being 3<sup>rd</sup> person zeroes, leaving 260. These make up 4.92% of the (estimated) total of 5,285 third person singular present tense forms.

In other corpora examined, 3<sup>rd</sup> person zeroes were obtained by searching for the pronouns *he*, *she*, and *it*, followed by the base form of a verb. For comparative reasons, it makes sense to look at VOICE in the same manner. Reading through the 260 3<sup>rd</sup> person zeroes in VOICE revealed that 69 follow either *he*, *she*, or *it*. An examination of the sample of -s endings showed that 171 of 502 follow *he*, *she*, or *it*. From this it can be estimated that 1,710 out of the 5,025 -s endings follow these pronouns. This means that there is an estimated total of 1,779 third person singular present tense forms following *he*, *she*, and *it*, and 69 of them are 3<sup>rd</sup> person zeroes (3.88% of the forms).

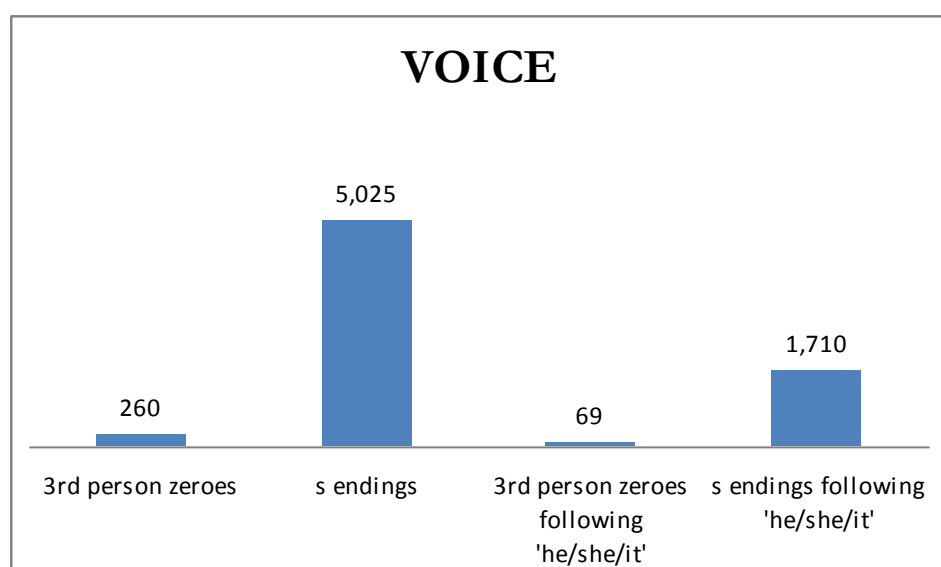


Figure 2. Third person singular present tense forms (of lexical verbs and DO) in VOICE. Data from section 4.2.1.

#### 4.2.2. The 3<sup>rd</sup> person zero in ELFA.

As explained in section 3.7, ELFA was tagged by me with CLAWS7. That tagset does not have a tag akin to V(VVZ), which allowed a search of VOICE specifically for the 3<sup>rd</sup> person zero. ELFA has too many instances of the base form of verbs for an unrestricted search. As mentioned above, 3<sup>rd</sup> person zeroes were obtained by searching for the base form following the pronouns *he*, *she*, and *it*. These searches of ELFA were conducted using WordSmith. The search strings

included the following tags: VV0, the base form of lexical verbs;<sup>57</sup> VVZ, the -s form of lexical verbs; PPHS1, *he* and *she*; and PPH1, *it*. A separate set of search strings was used to include the verb DO in the investigation. (As VOICE included DO in its tag for the 3<sup>rd</sup> person zero, an effort was made to make ELFA and VOICE comparable.) The additional tags were: VD0, *do*, the base form; VDI, *do*, the infinitive form, which I searched for in case any present tense base forms were mis-tagged by CLAWS7 as infinitive forms; and VDZ, *does*, the -s form. Contracted negatives (*don't*, *doesn't*) appeared among the hits. None of the searches could pick up instances of other words or punctuation in between *he*, *she*, and *it* and the verb, and in the case of DO, it should also be noted that the results could not show instances in which DO precedes the pronoun, e.g. in the tag question *doesn't she?*

All but one of the examined verbs tagged VVZ following *he*, *she*, and *it* conformed to standard usage, the exception being:

- 49        yeah *he says* he said s- he said that this that that sort of a er I-P-R is always has always been a sort of problem [ELFA, file CDIS08B, excerpt from sentence.]<sup>58</sup>

While *says* certainly ends with *s*, it is apparent from the speaker's subsequent self-correction<sup>59</sup> that the verb is in the past tense, not the present, so this hit cannot be counted as a third person singular present tense form.<sup>60</sup>

An example of a 3<sup>rd</sup> person zero tagged VV0 in ELFA is:

- 50        then accessibility to political power *it happen* only in two areas [ELFA, file CPRE09B, excerpt from sentence.]

The verbs tagged VDZ were all 3<sup>rd</sup> person singular present tense -s forms. Six 3<sup>rd</sup> person zeroes were found, all tagged VD0. Apparent 3<sup>rd</sup> person zeroes tagged VDI were excluded for being anacolutha (defined in section 5.1.2). Table 1 gives an overview of the search strings and hits.

---

<sup>57</sup> Searches were run of VVI (the infinitive form) following *he*, *she*, and *it*, to check that no VV0 (base form) was mis-tagged by CLAWS7 as VVI, and none was.

<sup>58</sup> There are no line numbers in ELFA. Excerpts are often quoted, rather than full sentences, because of their length.

<sup>59</sup> How I consider speech that the speaker subsequently corrects is explained in section 3.8.

<sup>60</sup> On non-standard use of the -s ending, see note 53.

Table 1. *He/she/it* + present tense forms (of lexical verbs and DO) in ELFA (zero forms in bold).

| Form of verb                        | Search string   | Hits  | Verified as this form |
|-------------------------------------|-----------------|-------|-----------------------|
| <i>He</i> + verb -s                 | he_PPHS1 *_VVZ  | 291   | 290                   |
| <i>She</i> + verb -s                | she_PPHS1 *_VVZ | 147   | 147                   |
| <i>It</i> + verb -s                 | it_PPH1 *_VVZ   | 1,261 | 1,261                 |
| <i>He</i> + verb 0                  | he_PPHS1 *_VV0  | 9     | <b>7</b>              |
| <i>She</i> + verb 0                 | she_PPHS1 *_VV0 | 5     | <b>3</b>              |
| <i>It</i> + verb 0                  | it_PPH1 *_VV0   | 61    | <b>31</b>             |
| <i>He does</i>                      | he_PPHS1 *_VDZ  | 27    | 27                    |
| <i>She does</i>                     | she_PPHS1 *_VDZ | 38    | 38                    |
| <i>It does</i>                      | it_PPH1 *_VDZ   | 248   | 248                   |
| <i>He do</i>                        | he_PPHS1 *_VD0  | 3     | <b>3</b>              |
| <i>She do</i>                       | she_PPHS1 *_VD0 | 2     | <b>2</b>              |
| <i>It do</i>                        | it_PPH1 *_VD0   | 8     | <b>1</b>              |
| <i>He do</i> infinitive             | he_PPHS1 *_VDI  | 2     | 0                     |
| <i>She do</i> infinitive            | she_PPHS1 *_VDI | 0     | 0                     |
| <i>It do</i> infinitive             | it_PPH1 *_VDI   | 0     | 0                     |
| Total -s endings                    |                 |       | 2,011                 |
| Total 3 <sup>rd</sup> person zeroes |                 |       | <b>47</b>             |
| Total forms                         |                 |       | 2,058                 |

There are 2,058 third person singular present tense forms following *he*, *she*, and *it*. There are 47 verified 3<sup>rd</sup> person zeroes (41 are tagged VV0, and 6 are tagged VD0), which is 2.28% of the forms.

#### 4.2.3 The 3<sup>rd</sup> person zero in VOICE and ELFA.

The 3<sup>rd</sup> person zero in ELF literature was surveyed in section 2.16.4. For example, Breiteneder (2009) investigated a pre-release version of VOICE, a small percentage of it, and found 3<sup>rd</sup> person zeroes to be 16.56% of third person singular present tense forms. In my investigation of

the full, released version of VOICE, that percentage is 4.92% (the percentage for VOICE in Carey 2013a was slightly higher at 5.8%). When considering only the 3<sup>rd</sup> person zeroes of the construction *he/she/it* + verb, that percentage is not greatly different at 3.88%. In ELFA, the *he/she/it* + zeroes are also a small percentage of the forms: 2.28%. These large ELF datasets, VOICE and ELFA, return very low percentages of 3<sup>rd</sup> person zeroes relative to -s endings. It seems that small ELF datasets that have produced high percentages of 3<sup>rd</sup> person zeroes (Figure 3) are too small to be reliable.

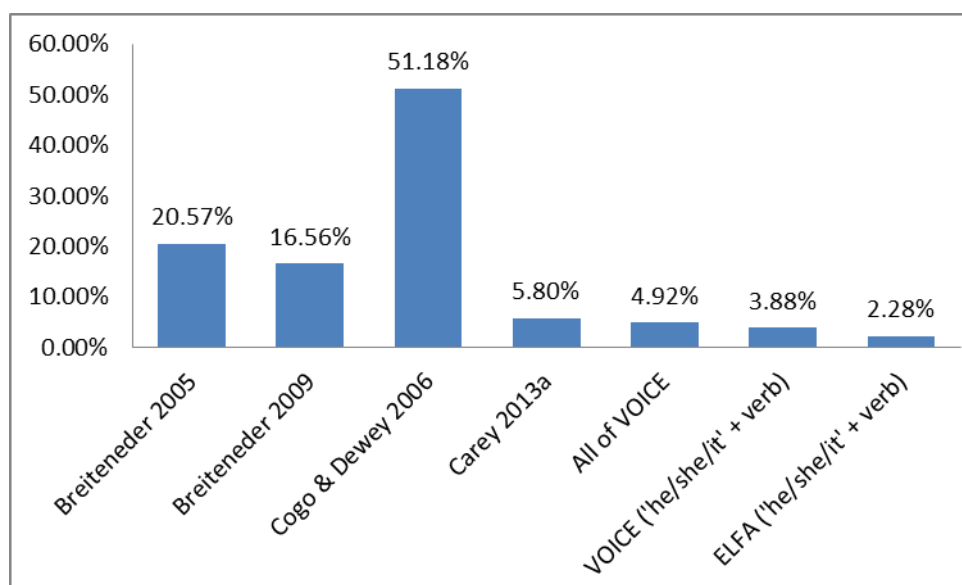


Figure 3. Percentages of third person singular present tense forms that are 3<sup>rd</sup> person zeroes: this study compared with previous studies. Data from sections 2.16.4, 4.2.1, and 4.2.2.

This finding discourages claims that the 3<sup>rd</sup> person zero ‘appears to be emerging as the default option in informal naturally occurring communications’ (Cogo and Dewey 2012: 49). The authors who wrote that did add the disclaimer that it was ‘at least in certain types of ELF settings’ (Cogo and Dewey 2012: 49), but there will be opportunity here to examine the ELF event types and domains where the 3<sup>rd</sup> person zero occurs (4.2.5 and 4.2.6).

The percentage is higher in VOICE than in ELFA. This may not prove to be important when the ELF corpora are compared to the NS and learner corpora, but there could be a difference between the two corpora that accounts for this – another reason to compare VOICE and ELFA by L1, event type, and domain.

#### 4.2.4. The 3<sup>rd</sup> person zero in VOICE and ELFA, by L1.

It was possible to discover the L1<sup>61</sup> of the speaker of each 3<sup>rd</sup> person zero in VOICE, and each 3<sup>rd</sup> person zero of the construction *he/she/it* + verb in ELFA; but it was not feasible for this study to discover the L1 of the speaker for each -s ending in VOICE and ELFA,<sup>62</sup> therefore the data in this section is restricted to the 3<sup>rd</sup> person zeroes by L1. The L1 data is presented in a series of tables: one for all 3<sup>rd</sup> person zeroes in VOICE (Table 2); one for the *he/she/it* + zeroes in VOICE (Table 3); and one for the *he/she/it* + zeroes in ELFA (Table 4).

The 260 3<sup>rd</sup> person zeroes in VOICE were spoken by speakers with 34 different L1s, which is unwieldy for analysis, so I divided the L1s into language groups. Languages were grouped together based on the nearest branch to them within their language family. The first four groups were formed this way: Romance (Catalan, French, Italian, Portuguese, Romanian, Spanish); Germanic (Danish, Dutch, German, Norwegian, Swedish); Balto-Slavic (Bulgarian, Croatian, Czech, Latvian, Polish, Russian, Serbian, Slovak, Ukrainian); and Semitic (Arabic, Maltese). Some languages were simply grouped by language family, and the next two groups were formed this way: Macro-Altaic (Japanese, Korean, Turkish), and Uralic (Estonian, Finnish, Hungarian). There were single languages that could not be grouped: Chinese, Vietnamese, Albanian,<sup>63</sup> Indonesian, Urdu, and English. The latter is a Germanic language, but considering the topic of this thesis, NS English is examined separately. 7.07% of the speech in VOICE is by NS English speakers,<sup>64</sup> who are included as users of ELF, as defined in section 2.1. These 34 languages are the only ones for which 3<sup>rd</sup> person zeroes were recorded in the speech of their L1 speakers. Languages for which this is not the case are simply grouped as ‘other’ in Table 2.<sup>65</sup>

Four of the 260 3<sup>rd</sup> person zeroes were spoken by speakers who had more than one L1. One had both French and German; one had both Spanish and Catalan; one had both English and Spanish; and one had both English and Maltese. The VOICE website provides a word count for each L1 represented in the corpus.<sup>66</sup> When the speaker had two L1s, the speaker was counted twice.<sup>67</sup> In

---

<sup>61</sup> L1 is defined in section 2.8.

<sup>62</sup> It involves examining hits for -s ending individually, with a process of several stages: for VOICE, 5,025 hits, opening each file to find the speaker for each hit, then using that speaker’s ID to find the L1 in the header of the relevant xml file; for ELFA, 2,011 hits, opening each text file to find the hit, then the speaker ID, then the L1 in the header.

<sup>63</sup> Albanian stands as a branch of its own within the Indo-European language family.

<sup>64</sup> All the L1s represented in VOICE 2.0 and the statistics for them can be seen online (VOICE, Statistics VOICE 2.0 Online: 2 First languages). The ISO 639-2 Language Codes are used, which can be viewed at <[http://www.loc.gov/standards/iso639-2/php/code\\_list.php](http://www.loc.gov/standards/iso639-2/php/code_list.php)>, with changes listed at <[http://www.loc.gov/standards/iso639-2/php/code\\_changes.php](http://www.loc.gov/standards/iso639-2/php/code_changes.php)>.

<sup>65</sup> See note 64.

<sup>66</sup> See note 64.

keeping with the composition of those VOICE word counts, the four abovementioned speakers were also counted twice; the number of 3<sup>rd</sup> person zeroes in Table 2 therefore adds up to 264 instead of 260. The COEFFICIENT for each L1 group in Table 2 is the number of 3<sup>rd</sup> person zeroes proportional to the number of words in VOICE that the L1 group has. The coefficients are therefore directly comparable with each other (and with any coefficients calculated this way from other corpora).

---

<sup>67</sup> This information is not on the VOICE website. I asked Nora Dorn of VOICE if a speaker was counted twice, once, or not at all in the statistics for first languages, when a speaker had more than one L1, and her response was, ‘if an individual has two L1s, for instance, French and German, they are counted in both rows’ (by email, 30/10/2013).



Table 2. The 3<sup>rd</sup> person zeroes (of lexical verbs and DO) in VOICE, by L1.

| A                          | B                       | C   | D  |
|----------------------------|-------------------------|---|--|
| L1 group                   | No. of words in VOICE   | No. of 3 <sup>rd</sup> person zeroes in VOICE | Coefficient of no. of 3 <sup>rd</sup> person zeroes to no. of words ( $C / B \times 1 \text{ million}$ ) |
| Romance <sup>68</sup>      | 174,820                 | 72  | 411.85   |
| Germanic <sup>69</sup>     | 464,485                 | 67  | 144.25   |
| Balto-Slavic <sup>70</sup> | 155,451                 | 53  | 340.94   |
| Semitic <sup>71</sup>      | 39,381                  | 20  | 507.86   |
| Macro-Altaic <sup>72</sup> | 35,526                  | 15  | 422.24   |
| Native speakers of English | 72,371                  | 10  | 138.18   |
| Uralic <sup>73</sup>       | 46,368                  | 9   | 194.1  |
| Chinese                    | 5,845                   | 8   | 1,368.69   |
| Vietnamese                 | 1,438                   | 4   | 2,781.64   |
| Albanian                   | 2,925                   | 2   | 683.76   |
| Indonesian                 | 2,237                   | 1   | 447.03   |
| Urdu                       | 1,270                   | 1   | 787.4  |
| L1 undetermined            | 4,061                   | 1   | 246.24   |
| Speaker unidentified       | Not given               | 1   | -  |
| Other                      | 41,858                  | 0   | 0  |
| Total                      | 1,048,036 <sup>74</sup> | 264   | 251.9  |

<sup>68</sup> Catalan 10,881 + French 36,047 + Italian 43,608 + Portuguese 20,205 + Romanian 22,608 + Spanish 41,471 = 174,820.

<sup>69</sup> Danish 55,851 + Dutch 107,421 + German 253,132 + Norwegian 31,838 + Swedish 16,243 = 464,485.

<sup>70</sup> Bulgarian 6,978 + Croatian 8,566 + Czech 16,887 + Latvian 14,373 + Polish 43,195 + Russian 13,324 + Serbian 35,675 + Slovak 12,969 + Ukrainian 3,484 = 155,451.

<sup>71</sup> Maltese 30,323 + Arabic 9,058 = 39,381.

<sup>72</sup> Japanese 1,276 + Korean 18,801 + Turkish 15,449 = 35,526.

<sup>73</sup> Estonian 4,069 + Finnish 30,557 + Hungarian 11,742 = 46,368.

The 69 3<sup>rd</sup> person zeroes in VOICE which were constructions of the kind *he, she, or it + verb* are examined separately. None of the four speakers who were counted twice in Table 2 uttered a 3<sup>rd</sup> person zero of this type, so the number of *he/she/it + zeroes* in VOICE remains 69 for Table 3. The composition of L1 groups is slightly different, with 21 languages (instead of 34).<sup>75</sup> Once again, the coefficient for each L1 group is the number of 3<sup>rd</sup> person zeroes weighted according to the number of words in VOICE that the L1 group has.

Table 3. *He/she/it + zeroes* (of lexical verbs and DO) in VOICE, by L1.

| A                          | B                       | C   | D   |
|----------------------------|-------------------------|---|---|
| L1 group                   | No. of words in VOICE   | No. of <i>he/she/it + zeroes</i> in VOICE | Coefficient of no. of 3 <sup>rd</sup> person zeroes to no. of words (C / B × 1 million) |
| Romance <sup>76</sup>      | 141,331                 | 23  | 162.74  |
| Balto-Slavic <sup>77</sup> | 122,050                 | 17  | 139.29  |
| Germanic <sup>78</sup>     | 448,242                 | 10  | 22.31   |
| Semitic                    | 39,381                  | 7   | 177.75  |
| Native speakers of English | 72,371                  | 3   | 41.45   |
| Chinese                    | 5,845                   | 3   | 513.26  |
| Vietnamese                 | 1,438                   | 3   | 2,086.23  |
| Korean                     | 18,801                  | 1   | 53.19   |
| Albanian                   | 2,925                   | 1   | 341.88  |
| Indonesian                 | 2,237                   | 1   | 447.03  |
| Other                      | 193,415                 | 0   | 0   |
| Total                      | 1,048,036 <sup>79</sup> | 69  | 65.84   |

<sup>74</sup> The first languages statistics given for VOICE 2.0 (see note 64) add up to this total. VOICE 2.0 gives its total word count elsewhere as 1,023,196 (VOICE, Statistics VOICE 2.0 Online: 1 Total numbers). The discrepancy must be because of speakers counted twice (see note 67).

<sup>75</sup> There is a smaller number of L1s making up each of the Romance, Balto-Slavic and Germanic L1 groups in Table 4 than there is in Table 3. The Semitic L1 group is the same (see note 71). Korean is the only language from the Macro-Altaic group in Table 3 that is represented in Table 4.

<sup>76</sup> French 36,047 + Italian 43,608 + Portuguese 20,205 + Spanish 41,471 = 141,331.

<sup>77</sup> Czech 16,887 + Polish 43,195 + Russian 13,324 + Serbian 35,675 + Slovak 12,969 = 122,050.

<sup>78</sup> Danish 55,851 + Dutch 107,421 + German 253,132 + Norwegian 31,838 = 448,242.

In ELFA, the 47 *he/she/it* + zeroes came from speakers with 19 known L1s between them. I divided these into 7 groups, first of all based on the nearest branch of languages to them within their language family. In this way, I formed the L1 groups Balto-Slavic (Czech, Lithuanian, Polish, Russian); Germanic (Danish, Dutch, Norwegian, Swedish); Indo-Iranian (Nepali, Persian a.k.a. Farsi); and Romance (French, Romanian). The next batch was formed by language family: Afro-Asiatic (Arabic, Somali); Niger-Congo (Dangme, Swahili, Twi a.k.a. Akan); and Uralic (Finnish, Hungarian). These 19 languages are the only ones for which 3<sup>rd</sup> person zeroes were recorded in the speech of their L1 speakers. Languages for which this is not the case are simply grouped as ‘other’ in Table 4, apart from NSs, who are listed separately. The coefficient for each L1 group is the number of 3<sup>rd</sup> person zeroes proportional to the number of words in ELFA that the L1 group has.

---

<sup>79</sup> See note 74.

Table 4. *He/she/it* + zeroes (of lexical verbs and DO) in ELFA, by L1.

| A                          | B                                  | C  | D   |
|----------------------------|------------------------------------|--|---|
| L1 group                   | No. of words in ELFA <sup>80</sup> | No. of <i>he/she/it</i> + zeroes in ELFA | Coefficient of no. of 3 <sup>rd</sup> person zeroes to no. of words (C / B × 1 million) |
| Balto-Slavic <sup>81</sup> | 120,638                            | 9  | 74.6  |
| Uralic <sup>82</sup>       | 305,685                            | 8  | 26.17   |
| Romance <sup>83</sup>      | 59,338                             | 8  | 134.82  |
| Germanic <sup>84</sup>     | 181,249                            | 6  | 33.1  |
| Niger-Congo <sup>85</sup>  | 25,789                             | 5  | 193.88  |
| Afro-Asiatic <sup>86</sup> | 21,437                             | 5  | 233.24  |
| Indo-Iranian <sup>87</sup> | 10,947                             | 4  | 365.4   |
| Unknown                    | 11,779                             | 2  | 169.79  |
| Native speakers of English | 53,609                             | 0  | 0   |
| Other                      | 266,860                            | 0  | 0   |
| Total                      | 1,057,331                          | 47                                       | 44.45   |

Section 2.11 mentioned claims for non-standard forms in ELF not being influenced by L1s. While this particular non-standard form, the 3<sup>rd</sup> person zero, is used by speakers with many different L1s, and therefore fits the description of being ‘shared’ by them (see section 2.11), the variation in the frequency of its occurrence among different L1 groups cannot rule out L1 influence. There are only a small number of 3<sup>rd</sup> person zeroes per group, but there seems to be a pattern that shows L1 influence. Analysis can be restricted to those groups that have at least six

<sup>80</sup> See section 2.1, note 6. These statistics are online (ELFA, First languages represented in the ELFA corpus).

<sup>81</sup> Czech 13,384 + Lithuanian 18,215 + Polish 19,134 + Russian 69,905 = 120,638.

<sup>82</sup> Finnish 301,632 + Hungarian 4,053 = 305,685.

<sup>83</sup> French 37,918 + Romanian 21,420 = 59,338.

<sup>84</sup> Danish 39,957 + Dutch 58,823 + Norwegian 14,984 + Swedish 67,485 = 181,249.

<sup>85</sup> Dangme 2,364 + Swahili 10,910 + Twi/Akan 12,515 = 25,789.

<sup>86</sup> Arabic 9,243 + Somali 12,194 = 21,437.

<sup>87</sup> Nepali 1,705 + Persian/Farsi 9,242 = 10,947.

3<sup>rd</sup> person zeroes: the top four groups of Tables 3 and 4. What is interesting about these L1 groups is the way they can be ranked by coefficient (Figure 4).

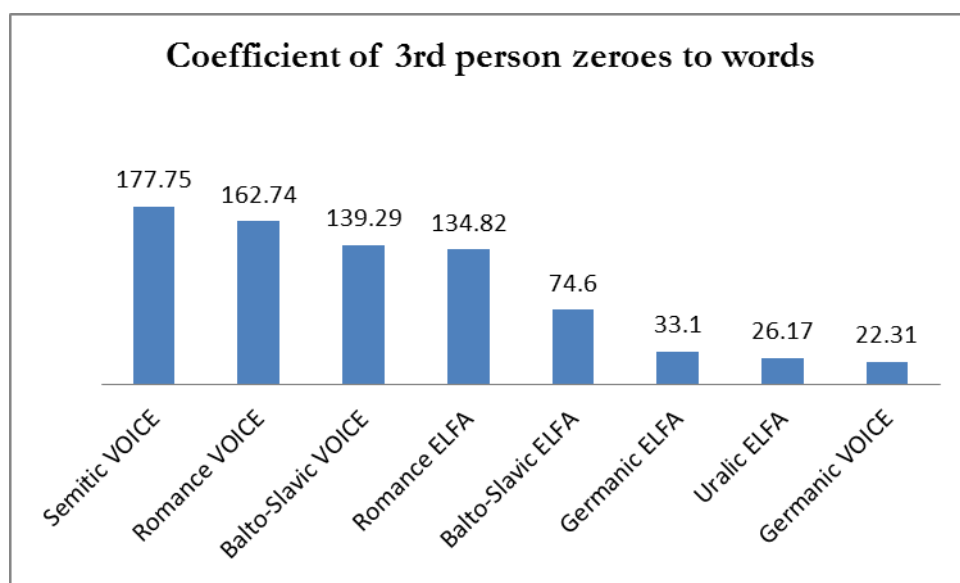


Figure 4. Ranking of coefficients of *he/she/it* + zeroes (of lexical verbs and DO) to words per L1 group (with at least six *he/she/it* + zeroes per L1 group), in VOICE and ELFA. Data from Tables 3 and 4.

For groups of this kind that are in both VOICE and ELFA, they are ranked in the same order: Romance, Balto-Slavic, and Germanic, which, as a pattern, indicates possible L1 influence across the two corpora. Within each corpus, Romance L1s are consistently speaking more *he/she/it* + zeroes than Balto-Slavic and Germanic L1s. In comparison between corpora, it is not that cut-and-dry, as the Balto-Slavic group in VOICE has more of these zeroes than the Romance group in ELFA. However, the rate of occurrence of 3<sup>rd</sup> person zeroes is higher in VOICE than ELFA. It seems that with more *he/she/it* + zeroes overall (VOICE), the same pattern exists (Romance, Balto-Slavic, Germanic), but the effects are more pronounced, and at both ends of the scale: the Germanic group in VOICE has even fewer zeroes than the Germanic group in ELFA.

Observations about the *he/she/it* + zeroes in VOICE must be tempered by the data collected about all of VOICE, but here again, the top four groups in Table 2 are ranked by coefficient in the order Semitic, Romance, Balto-Slavic, Germanic, which seems to back up what is displayed by the *he/she/it* + verb construction.

The Germanic groups are at the low end of the scale in Figure 4; and in VOICE, the Germanic group in Table 3 is close numerically to where NS English is, which ties in with Carey's finding in VOICE about 'German, Dutch, and English. Their rate of occurrence of 3<sup>rd</sup>-person zero is

identical at 3% of verbs functioning as 3rd-person present singular’ (Carey 2013*b*).<sup>88</sup> Indeed, in ELFA, the German language itself is not included in the Germanic group (see note 84); it and NS English has an equal number of 3<sup>rd</sup> person zeroes: none. Speakers with L1s most similar to English (the Germanic languages) have comparatively few 3<sup>rd</sup> person zeroes.

The highest occurrence of *he/she/it* + zeroes is in the Semitic group in VOICE. Perhaps this is an indication that 3<sup>rd</sup> person zeroes occur more often with non-European L1 speakers. ‘Non-European’ does not mean non-Indo-European languages. The Uralic L1 group has few zeroes, and their languages are not from the Indo-European family, and are very different from English. These languages may be similar to English in this one feature. Otherwise, if any pattern can be seen here, it is not based on language family, but is somehow geographical, and may reflect English use in Europe, where Uralic languages can be found.

#### 4.2.5. Third person singular present tense forms in VOICE and ELFA, by event type.

The third person singular present tense forms in VOICE and ELFA were spoken in different kinds of lingua franca events. Data was collected on how they appear in the ELF corpora by event type, with the idea of looking for any patterns, or seeing if they are prominent in any event type. The event type data is set out in three tables: one for all of VOICE (Table 5); one for the *he/she/it* + verb constructions in VOICE (Table 6); and one for the *he/she/it* + verb constructions in ELFA (Table 7).

Each VOICE file is identified with a ‘Speech Event Type’,<sup>89</sup> of which there are ten. I sorted these into a manageable five categories:<sup>90</sup> Discussion; Meeting; Conversation; Interview / Press conference / Question-answer session; and Service encounter, as can be seen in Table 5. The forms were cross-referenced by the files they appeared in, in a manual count (the event type of each VOICE file is included in its file name, e.g. *mtg* means Meeting).

---

<sup>88</sup> Carey obtained percentages of third person singular present tense forms (3<sup>rd</sup> person zeroes and –s endings) for some of the L1s in VOICE (Carey 2013*b* Table 4).

<sup>89</sup> The VOICE ‘Speech Event Types’ are defined online (VOICE Corpus Information page). See also section 3.2.3.

<sup>90</sup> See section 3.2.3.

Table 5. Third person singular present tense forms (of lexical verbs and DO) in VOICE, by event type.

| Event type   | No. of third person singular present tense -s endings | No. of 3 <sup>rd</sup> person zeroes | Total of third person singular present tense forms | % of forms that are 3 <sup>rd</sup> person zeroes |
|--|---|--------------------------------------|--|---|
| Discussion <sup>91</sup>                                 | 2,542   | 147                                  | 2,689  | 5.47  |
| Meeting <sup>92</sup>                                    | 1,162   | 52                                   | 1,214  | 4.28  |
| Conversation <sup>93</sup>                               | 896   | 39                                   | 935  | 4.17  |
| Interview /<br>Press conference /<br>Q & A <sup>94</sup> | 384   | 21                                   | 405  | 5.19  |
| Service encounter <sup>95</sup>                          | 41  | 1                                    | 42   | 2.38  |
| Total  | 5,025   | 260                                  | 5,285  | 4.92  |

The equivalent data for the *he/she/it* + zeroes in VOICE is supplied in Table 6. For this, the number of forms following *he*, *she*, or *it* has to be established for each event type. This was straightforward enough for 3<sup>rd</sup> person zeroes, but, as explained in 4.2.1, the number of *he/she/it* + -s endings (1,710) was only an estimate. It was based on a sample of hits tagged for the base form of the verb (every tenth one). Using the same sample as before, the 171 -s endings that followed *he*, *she*, and *it* were examined, and an estimated number of -s endings was extrapolated from that. For instance, 74 out of 171 *he/she/it* + -s endings were found in the Discussion event type, and that becomes an estimate of 740 in Discussion in VOICE overall.

<sup>91</sup> VOICE files with names beginning with EDsed, EDwgd, EDwsd, PBpan, POWgd, POWsd, PRpan, or PRwgd.

<sup>92</sup> VOICE files with names beginning with PBmtg or POMtg.

<sup>93</sup> VOICE files with names beginning with EDcon, LEcon, PBcon, POcon, or PRcon.

<sup>94</sup> VOICE files with names beginning with EDint, LEint, PBqas, POprc, PRint, and PRqas.

<sup>95</sup> VOICE files with names beginning with EDsve or PBsve.

Table 6. *He/she/it* + present tense forms (of lexical verbs and DO) in VOICE, by event type.

| Event type   | No. of <i>he/she/it</i> + -s endings (estimated) | No. of <i>he/she/it</i> + zeroes | Total of <i>he/she/it</i> + present tense verb forms | % of forms that are <i>he/she/it</i> + zeroes |
|--|--|----------------------------------|--|---|
| Discussion   | 740  | 30                               | 770  | 3.9   |
| Conversation   | 420  | 23                               | 443  | 5.19  |
| Meeting  | 360  | 11                               | 371  | 2.96  |
| Interview /<br>Press conference /<br>Q & A <sup>96</sup> | 150  | 5                                | 155  | 3.23  |
| Service encounter  | 40   | 0                                | 40   | 0   |
| Total  | 1,710  | 69                               | 1,779  | 3.88  |

There are twelve different event types given for ELFA, but I have grouped these into three broader event types:<sup>97</sup> Discussion, Presentation, and Lecture, as can be seen in Table 7. The third person singular present tense forms from the hits were cross-referenced by the files they appeared in, in a manual count (the event type of each ELFA file is included in its file name, e.g. *DIS* means Discussion<sup>98</sup>).

<sup>96</sup> No *he/she/it* + zeroes were found in the press conference events.

<sup>97</sup> See section 3.3.3. The twelve event types are visible in the ELFA file 'ELFA\_index.xls'. The event type of each ELFA file is included in its file name.

<sup>98</sup> The exception is UOTH010, where *OTH* just means other. In that case I had to look at the header of the file to see that it is a panel discussion.



Table 7. *He/she/it* + present tense forms (of lexical verbs and DO) in ELFA, by event type.

| Event type                  | No. of <i>he/she/it</i> + -s endings | No. of <i>he/she/it</i> + zeroes | Total of <i>he/she/it</i> + present tense verb forms | % of forms that are <i>he/she/it</i> + zeroes |
|-----------------------------|--------------------------------------|----------------------------------|--|---|
| Discussion <sup>99</sup>    | 1,470                                | 34                               | 1,504  | 2.26  |
| Lecture <sup>100</sup>      | 257                                  | 7                                | 264  | 2.65  |
| Presentation <sup>101</sup> | 284                                  | 6                                | 290  | 2.07  |
| Total                       | 2,011                                | 47                               | 2,058  | 2.28  |

Cogo and Dewey found the 3<sup>rd</sup> person zero to be ‘particularly widespread’ in Dewey’s data (Cog and Dewey 2012: 49), which included ‘informal entirely unplanned conversations’ as well as ‘formal seminar presentations’ (Cogo and Dewey 2006: 63). 3<sup>rd</sup> person zeroes are ‘widespread’ here, in that 3<sup>rd</sup> person zeroes were found in those same event types, and more. Yet in all event types, the rate of 3<sup>rd</sup> person zeroes is low, only between 2% and 5%, while Dewey had 51.18% (Cogo and Dewey 2006: 77).

3<sup>rd</sup> person zeroes do not appear very much more frequently in one event type than another. It can be seen in VOICE (Table 5) that Discussion has the highest percentage of 3<sup>rd</sup> person zeroes, while among the *he/she/it* + zeroes in VOICE (Table 6) this is disguised; it has the second highest percentage. However, it is unlikely that this very much matters, as all the percentages are close together. No event type seems in particular has a bearing on the production of this non-standard form.

#### 4.2.6. Third person singular present tense forms in VOICE and ELFA, by domain.

All language in ELFA is in the educational domain. VOICE covers five domains: Professional organizational; Educational; Professional business; Professional research and science; and Leisure.<sup>102</sup> The data on third person singular present tense forms in VOICE domains is set out in two tables: one for all of VOICE (Table 8), and one for the *he/she/it* + verb constructions in

<sup>99</sup> CDIS, UDEFD, ULECD, UOTH and USEMD files.

<sup>100</sup> ULEC files (not including ULECD files).

<sup>101</sup> CPRE, UDEFP and USEMP files.

<sup>102</sup> VOICE files with names beginning with, respectively, PO, ED, PB, PR, and LE. Each domain is defined online (VOICE Corpus Information page). See also section 3.2.4.

VOICE (Table 9). The forms were cross-referenced by the files they appeared in, in a manual count (the domain of each VOICE file is included in its file name, e.g. *PO* means Professional organizational).

Table 8. Third person singular present tense forms (of lexical verbs and DO) in VOICE, by domain.

| <b>Domain</b>                     | <b>No. of third person singular present tense -s endings</b> | <b>No. of 3<sup>rd</sup> person zeroes in VOICE</b> | <b>Total of third person singular present tense forms</b> | <b>% of forms that are 3<sup>rd</sup> person zeroes</b> |
|-----------------------------------|--|---|---|---|
| Professional organizational       | 1,737  | 79  | 1,816   | 4.35  |
| Educational                       | 1,363  | 71  | 1,434   | 4.95  |
| Professional business             | 850  | 42  | 892   | 4.71  |
| Professional research and science | 510  | 40  | 550   | 7.27  |
| Leisure                           | 565  | 28  | 593   | 4.72  |
| Total                             | 5,025  | 260   | 5,285   | 4.91  |

For Table 9, there was a similar task performed as that for Table 6. The number of forms following *he*, *she*, or *it* has to be established for each domain, but the number of *he/she/it* + *-s* endings presented above in 4.2.1 (1,710) was only an estimate, based on a sample. Using the same sample as before, the 171 *-s* endings that followed *he*, *she*, and *it* were examined, and an estimated number of *-s* endings was extrapolated from that. For instance, 55 out of 171 *he/she/it* + *-s* endings were found in the Educational domain, and that becomes an estimate of 550 in the Educational domain in VOICE overall.

Table 9. *He/she/it* + present tense forms (of lexical verbs and DO) in VOICE, by domain.

| Domain                          | No. of <i>he/she/it</i> + -s endings (estimated) | No. of <i>he/she/it</i> + zeroes | Total of <i>he/she/it</i> + present tense verb forms | % of forms that are <i>he/she/it</i> + zeroes |
|---------------------------------|--|----------------------------------|--|---|
| Educational                     | 550  | 23                               | 573  | 4.01  |
| Leisure                         | 260  | 17                               | 277  | 6.14  |
| Professional organizational     | 470  | 13                               | 483  | 2.69  |
| Professional business           | 290  | 12                               | 302  | 3.97  |
| Professional research & science | 140  | 4                                | 144  | 2.78  |
| Total                           | 1,710  | 69                               | 1,779  | 3.88  |

The *he/she/it* + zero data disguises the overall picture in VOICE; apart from the Professional organizational domain having the lowest percentage of 3<sup>rd</sup> person zeroes, there is no similarity between the two groups of percentages. However, the rate of 3<sup>rd</sup> person zeroes is a low percentage no matter what the domain, so it is hard to argue that there is much of a difference between domains. The highest percentage, 7.27%, does not seem prominent. Dewey's data, which showed 51.18% 3<sup>rd</sup> person zeroes (Cogo and Dewey 2006: 77) was in the educational domain (Cogo and Dewey 2012: 40). Having now seen both the event types and the domains of ELF corpora, it does not seem to be the case that 'at least in certain types of ELF settings, [the] 3<sup>rd</sup> person zero appears to be emerging as the default option' (Cogo and Dewey 2012: 49).

One could imagine the Educational domain in VOICE looking more similar to the all-Educational ELFA than the whole of VOICE does, but this is not the case (Figure 5). Insofar as the differences between percentages are meaningful, the Educational domain in VOICE has a slightly higher percentage of *he/she/it* 3<sup>rd</sup> person zeroes than VOICE as a whole. In any event, no domain in VOICE has a high percentage of this form, and none stands out as an influencing factor.

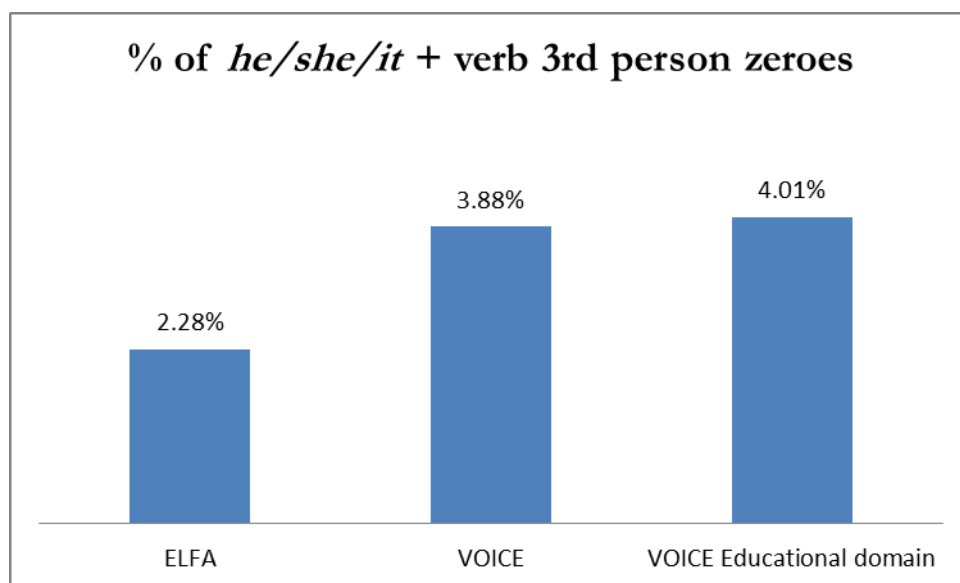


Figure 5. Percentages of third person singular present tense forms (of lexical verbs and DO) that are 3<sup>rd</sup> person zeroes of the construction *he/she/it* + verb, in ELFA, VOICE, and the Educational domain of VOICE. Data from section 4.2.2 and Table 9.

### 4.3. The NS English corpus, the BNC.

#### 4.3.1. The 3<sup>rd</sup> person zero in the BNC Spoken components.

The BNC version 4.0 is chosen as the NS English corpus to compare with the ELF corpora.<sup>103</sup> The Spoken components were searched. There is no tag akin to V(VVZ), which allows for a search of VOICE specifically for the 3<sup>rd</sup> person zero. Instead, searches were conducted using BNCweb for the tag VVB, the base form of lexical verbs,<sup>104</sup> and VVZ, the *-s* form of lexical verbs, both following *he*, *she*, and *it*.

The searches included the verb DO. VDZ, the *-s* form of DO; VDB, the base form of DO; and VDI, the infinitive form of DO were searched for, following *he*, *she*, and *it*. Contracted negatives (*don't*, *doesn't*, *dun*<sup>105</sup>) appeared among the hits. VDI was included in case any base forms were mis-tagged as infinitive forms, and some were, for example, this is a 3<sup>rd</sup> person zero:

- 51      *she don't* get through a lot of chocolates does she? [BNC Spoken Demographic, file KE3, line 988, excerpt.]

<sup>103</sup> The BNC is described in section 3.4. It has its own terminology, such as ‘matches’ and ‘query string’, but I use ‘hits’ and ‘search string’, respectively.

<sup>104</sup> A 50% sample of VVI (the infinitive form) following *he*, *she*, and *it* was examined to ensure that no VVI was mis-tagged and ought to be VVB (the base form). None was.

<sup>105</sup> As part of *dunno*.

The VVZ and VDZ searches produced thousands of results, and it was possible to check a sample of 10% of them for correct tagging.<sup>106</sup> There were no mis-taggings within the samples.

All the searches excluded instances of other words or punctuation in between *he*, *she*, and *it* and the verb, and any instances in which the verb comes first, for instance, it can be seen from a construction found in the context of example 43 above (*don't be Kevin?*) that interrogatives are left out, and are not captured by the searches.

From the VVB and VDB searches, typical 3<sup>rd</sup> person zeroes were found. The interesting variation of zeroes with DO (relevant later) can be seen in these three examples.

- 52     he can't understand English but he'd be watching this right and it is ha laugh so something must be funny but *he dunno* what's happening [BNC Spoken Demographic, file KCM, line 542, excerpt]
- 53     *She don't* remind you of anybody she is who she is! [BNC Spoken Demographic, file KD5, line 3031, complete.]
- 54     Course *it do* course it do. [BNC Spoken Demographic, file KDS, line 159, complete.]

The search strings and hits are presented in Table 10.

---

<sup>106</sup> When sampling from BNC results, the hits were first randomized, by putting the 'Solutions' (hits) in 'Random order', rather than 'Corpus order', on the 'BNC Query Result' screen.

Table 10. *He/she/it* + present tense forms (of lexical verbs and DO) in the BNC Spoken components (zero forms in bold).

| Form of verb                        | Search string | Hits   | No. of hits examined        | Verified as this form |
|-------------------------------------|---------------|--------|-----------------------------|-----------------------|
| <i>He</i> + verb -s                 | he_VVZ        | 8,443  | 844 (sample) <sup>107</sup> | 8,443 (estimate)      |
| <i>She</i> + verb -s                | she_VVZ       | 4,468  | 447 (sample)                | 4,468 (estimate)      |
| <i>It</i> + verb -s                 | it_VVZ        | 12,142 | 1,214 (sample)              | 12,142 (estimate)     |
| <i>He</i> + verb 0                  | he_VVB        | 522    | 522                         | <b>429</b>            |
| <i>She</i> + verb 0                 | she_VVB       | 334    | 334                         | <b>257</b>            |
| <i>It</i> + verb 0                  | it_VVB        | 504    | 504                         | <b>135</b>            |
| <i>He does</i>                      | he_VDZ        | 1,506  | 151 (sample)                | 1,506 (estimate)      |
| <i>She does</i>                     | she_VDZ       | 913    | 91 (sample)                 | 913 (estimate)        |
| <i>It does</i>                      | it_VDZ        | 3,646  | 365 (sample)                | 3,646 (estimate)      |
| <i>He do</i>                        | he_VDB        | 342    | 342                         | <b>336</b>            |
| <i>She do</i>                       | she_VDB       | 205    | 205                         | <b>203</b>            |
| <i>It do</i>                        | it_VDB        | 471    | 471                         | <b>275</b>            |
| <i>He do</i> infinitive             | he_VDI        | 133    | 133                         | <b>3</b>              |
| <i>She do</i> infinitive            | she_VDI       | 77     | 77                          | <b>1</b>              |
| <i>It do</i> infinitive             | it_VDI        | 69     | 69                          | <b>3</b>              |
| Total -s endings                    |               |        | 3,112 (sample)              | 31,118                |
| Total 3 <sup>rd</sup> person zeroes |               |        |                             | <b>1,642</b>          |
| Total forms                         |               |        |                             | 32,760                |

<sup>107</sup> In each case of sampling from the BNC hits, 10% of the Spoken Demographic hits and 10% of the Spoken Context-governed hits were examined, to assist the examination of the data by event type in 4.3.2 (the components differ by event type), and domain in 4.3.3. For example, out of the 8,443 hits for 'he\_VVZ', 5,393 of them were in the Demographic component and 3,050 of them were in the Context-governed component, and the sample consisted of a random sample of 539 Demographic hits, plus a random sample of 305 Context-governed hits, which equals 844. It can be seen that there were no mis-taggings in the samples examined for Table 10.

Everything counted in the ‘Verified as this form’ column is either a 3<sup>rd</sup> person zero or an -s form. There are 1,642 3<sup>rd</sup> person zeroes (821 are tagged VVB, 814 are tagged VDB, and 7 are tagged VDI), which is 5.01% of the forms. This percentage is higher than that found in the ELF corpora, which is unexpected (Figure 6).

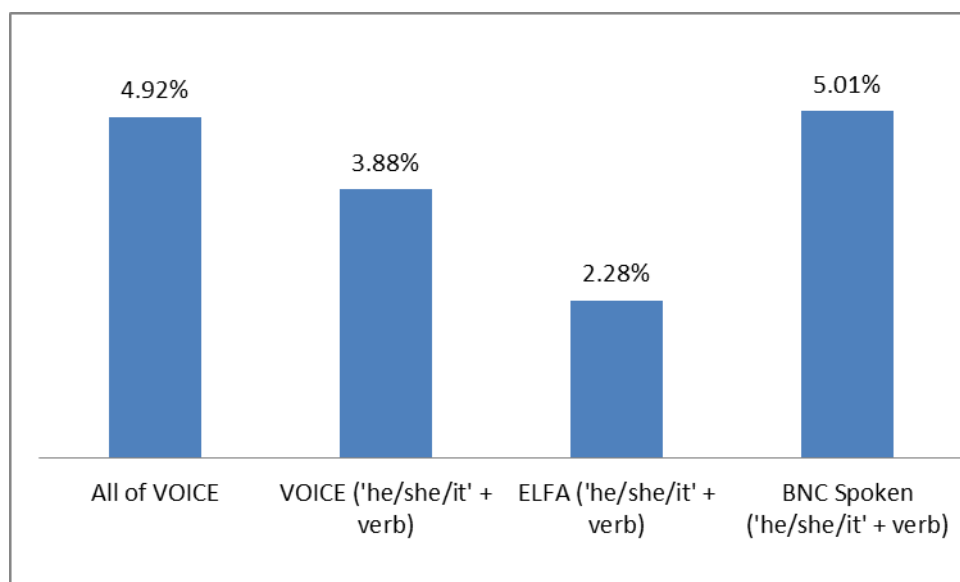


Figure 6. Percentages of third person singular present tense forms (of lexical verbs and DO) that are 3<sup>rd</sup> person zeroes, in VOICE, ELFA, and the BNC Spoken components. Data from sections 4.2.1, 4.2.2, and 4.3.1.

One rarely expects to find so-called non-standard forms to be more prevalent among NS speakers than among other users of the language. This raises the possibility that the 3<sup>rd</sup> person zero is a feature of spoken NS English (see section 2.13). But as we shall see, the most likely possibility concerning this 5.01% is that there is a high frequency of the use of 3<sup>rd</sup> person zeroes within the BNC in certain event types (see section 4.3.2).

#### 4.3.2. Third person singular present tense forms in the BNC Spoken components, by L1 and event type.

The BNC consist of speakers with a single L1, NS English. Calculating a coefficient of *he/she/it* + zeroes to words for its Spoken components, to compare with the ELF data from 4.2.4,<sup>108</sup> does not add to what is already known from 4.3.1. – a relatively high use of 3<sup>rd</sup> person zeroes among NSs. It is more profitable to look at event types, which may be distorting the overall picture of spoken NS English. The two components of spoken material in the BNC, Demographic and Context-governed, are introduced in chapter 3.4.2. In the BNC header information for the

<sup>108</sup> The BNC Spoken components consist of 10,409,858 words. The number of *he/she/it* + zeroes is 1,642. Dividing 1,642 by the number of words and multiplying it by one million, the coefficient is 157.74.

Demographic files, there is only one event type, and that is Conversation.<sup>109</sup> The Context-governed component includes all the other event types. Table 11 shows the event types, and the number of third person singular present tense forms for each.<sup>110</sup>

For the *-s* endings, only 10% of them were examined, as documented in Table 10. An estimated number of *-s* endings per event type was extrapolated from the same 10% sample as before. For instance, 104 out of 3,112 *he/she/it* + *-s* endings were found in the Interview event type, which becomes an estimate of 1,040 (ten times more) for Interview. The number of *-s* endings for Conversation is not an estimate because the event type (Conversation) and the Spoken component (Demographic) are one and the same.<sup>111</sup>

Table 11. Third person singular present tense forms (of lexical verbs and DO) in the BNC Spoken components, by event type.

| Event type               | No. of <i>he/she/it</i> + <i>-s</i> endings <sup>112</sup> | No. of <i>he/she/it</i> + zeroes | Total of <i>he/she/it</i> + present tense verb forms | % of forms that are <i>he/she/it</i> + zeroes |
|--------------------------|--|----------------------------------|--|---|
| Conversation             | 16,899   | 1,435                            | 18,334   | 7.83  |
| Interview <sup>113</sup> | 1,040  | 115                              | 1,155  | 9.96  |
| Meeting                  | 2,950  | 27                               | 2,977  | 0.91  |
| Broadcast discussion     | 1,810  | 11                               | 1,821  | 0.6   |
| Classroom                | 1,470  | 11                               | 1,481  | 0.74  |
| Speech unscripted        | 1,270  | 8                                | 1,278  | 0.63  |
| Sermon                   | 720  | 5                                | 725  | 0.69  |

<sup>109</sup> An event type is called a 'genre classification' in the BNC header information for a file.

<sup>110</sup> For each hit, it involves looking up the header information for the file it appears in.

<sup>111</sup> Though the number of *-s* endings verified to be *-s* endings was estimated from a sample (Table 10).

<sup>112</sup> The total is 31,109, which is 9 *-s* endings lower than 31,118 (the total of *-s* endings in Table 10). While 16,899 (Conversation) out of 31,109 is equal to a number of hits (for *-s* endings following *he*, *she*, and *it* in the Demographic component), the remaining 14,210 are estimates based on 1,421 hits (sampled from 14,219 hits for *-s* endings following *he*, *she*, and *it* in the Context-governed component). The sample is 10%, so when 14,219 is divided by 10, there is 0.9 'left over', and excluded from the sample. Multiplied by 10 it is 9. I would not have added 1 to the sample because each search string is sampled separately (see Table 10).

<sup>113</sup> This is 's interview' and 's interview: oral history' combined.



|   |                          |       |        |      |
|---|--------------------------|-------|--------|------|
| Sports live                                   | 180                      | 5     | 185    | 2.7  |
| Broadcast documentary                         | 50                       | 5     | 55     | 9.09 |
| Lecture <sup>114</sup>                        | 960                      | 4     | 964    | 0.41 |
| Unclassified <sup>115</sup>                   | 940                      | 4     | 944    | 0.42 |
| Tutorial                                      | 390                      | 3     | 393    | 0.76 |
| Courtroom                                     | 270                      | 3     | 273    | 1.1  |
| Public debate                                 | 630                      | 2     | 632    | 0.32 |
| Consultation                                  | 580                      | 1     | 581    | 0.17 |
| Broadcast news                                | 440                      | 1     | 441    | 0.23 |
| Speech scripted                               | 230                      | 1     | 231    | 0.43 |
| Demonstration                                 | 110                      | 1     | 111    | 0.9  |
| Parliament                                    | 170                      | 0     | 170    | 0    |
| Total not including Conversation              | 14,210                   | 207   | 14,417 | 1.44 |
| Total not including Conversation or Interview | 13,170                   | 92    | 13,262 | 0.69 |
| Total   | 31,109<br>(see note 112) | 1,642 | 32,751 | 5.01 |

Many of the event types in Table 11 have a small number of -s endings and a small number of 3<sup>rd</sup> person zeroes. This may indicate too few opportunities for speakers to use the third person present tense in these events. To restrict the perspective to the event types with more than ten 3<sup>rd</sup> person zeroes, the highest percentage of forms that are *he/she/it* + zeroes occurs in the Interview event type, with Conversation coming second. Meeting, Classroom, and Broadcast Discussion are significantly lower. Here is an indication that certain event types are responsible for raising the BNC Spoken percentage discussed in 4.3.1. When the BNC Spoken is divided into its two

---

<sup>114</sup> This is the five genres of 's lect' combined.

<sup>115</sup> Three 'unclassified' examples were training sessions, and one was a meeting *and* lecture (a leeting, or mecture?).

components, Demographic (Conversation event type) and Context-governed (all other Spoken event types), the comparison with the ELF corpora is altered (Figure 7).

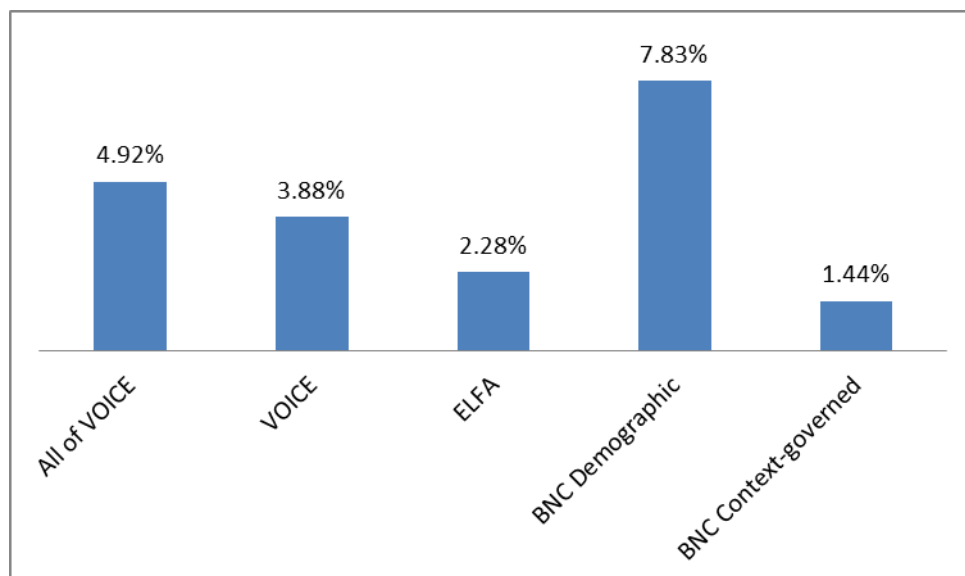


Figure 7. Percentages of third person singular present tense forms (of lexical verbs and DO) that are 3<sup>rd</sup> person zeroes, in VOICE, ELFA, and the separate BNC Spoken components. These are 3<sup>rd</sup> person zeroes in constructions of the kind *he/she/it* + verb, except ‘All of VOICE’, which represents all the 3<sup>rd</sup> person zeroes of lexical verbs and DO in VOICE. Data from sections 4.2.1, 4.2.2, and Table 11.

In Figure 7, without the Conversation event type (the Demographic component), the rest of the Spoken event types in the BNC (the Context-governed component) have a lower percentage of 3<sup>rd</sup> person zeroes than the ELF corpora. One would expect NSs to be using a non-standard form less often than users of ELF do. When Conversation is discounted, the percentage is now only 1.44%.<sup>116</sup> One wonders why NS Conversation has such a high rate of 3<sup>rd</sup> person zeroes. A difference between the BNC Spoken components, and therefore Conversation versus the other event types, a difference which is not visible in Tables 10 and 11, is in the search strings for VDB (the base form of DO). Figure 8 reveals this difference.

<sup>116</sup> This is presented as 1.44% to be consistent with Tables 11 and 12, in which there are 14,210 *-s* endings rather than 14,219 because of the sampling procedure (see note 112). The true percentage is 1.43%. The 32,760 forms in Table 10 consist of 16,899 *-s* endings and 1,435 3<sup>rd</sup> person zeroes in the Demographic component, and 14,219 *-s* endings and 207 3<sup>rd</sup> person zeroes in the Context-governed component.  $14,219 + 207 = 14,426$ .  $14,426 / 100 = 144.26$ .  $207 / 144.26 = 1.43$ .

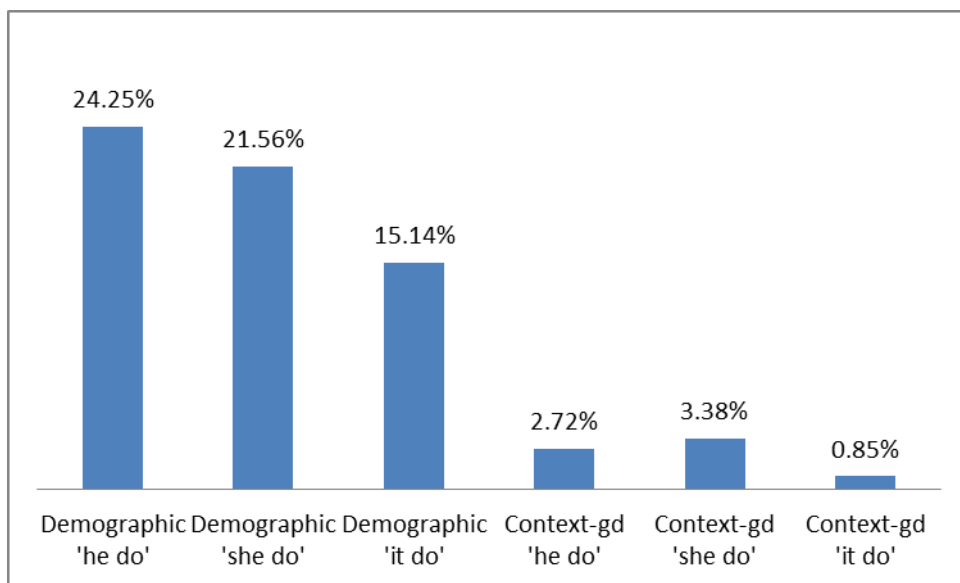


Figure 8. Percentages of third person singular present tense forms of the construction *he/she/it + DO* that are 3<sup>rd</sup> person zeroes of *DO*, in the BNC Spoken components. Data not presented elsewhere.

These percentages show that especially with the verb *DO*, the Conversation event type produces 3<sup>rd</sup> person zeroes in the NS English corpus. These are zeroes of the kind shown in examples 52-54, *he dunno, she don't, it do*. In addition, if the Interview event type were to be taken into account, the Context-governed percentage would reduce even further, to 0.69% (see Table 11). Out of 40 3<sup>rd</sup> person zeroes found in the Context-governed component due to VDB search strings, 21 occur in the Interview event type.

VOICE, ELFA, and the BNC all contain a different set of event types, but there are some in common, which can be compared with one another. Figure 9 brings these together, ranking them by percentage.

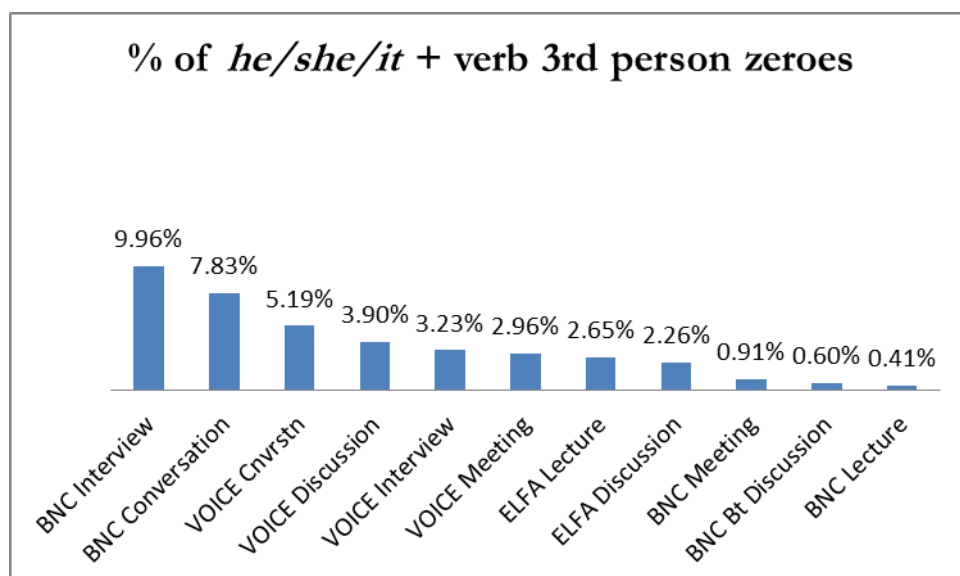


Figure 9. Percentages of third person singular present tense forms (of lexical verbs and DO) of the construction *he/she/it* + verb that are 3<sup>rd</sup> person zeroes, in selected event types of the BNC Spoken components, compared with selected event types of ELF corpora (VOICE and ELFA). Data from Tables 6, 7, and 11.

There does not seem to be any event type in the ELF corpora that accounts for the difference between ELF and NS English – L1 in the ELF corpora is a stronger candidate for something that accounts for this (see section 4.2.4).

There is a pronounced difference in Figure 9 within the BNC Spoken components (Interview and Conversation versus everything else), with all of the ELF event type percentages coming in between the two BNC extremes (as with Figure 7). Other than that, there is no real pattern between corpora in the way the event types are ranked.

It seems strange to have these high percentages of 3<sup>rd</sup> person zeroes among NSs, especially when they follow *he*, *she*, and *it*, that is, when the speakers are unlikely to forget the pronouns with which their verbs are supposed to be agreeing. One might suspect that the 3<sup>rd</sup> person zeroes in Conversation and Interview might be coming from a single dialect of English. A brief investigation into this was made.<sup>117</sup> There were too many 3<sup>rd</sup> person zeroes in Conversation to investigate, but the 207 zeroes in the Context-governed component (including 115 Interview) were examined. Regions are identified in the Spoken components of the BNC as ‘where spoken text was captured’,<sup>118</sup> and are identified as being ‘North’, ‘Midlands’, ‘South’, or ‘Unknown’. (In some cases I discounted the definition of region as ‘where spoken text was captured’ because the

<sup>117</sup> For each hit, it involves looking up the header information for the file it appears in.

<sup>118</sup> Stated in the file header information.

speech was from a broadcast documentary featuring speakers from the U.S.) The BNC regional spread for Context-governed, and for Interview on its own, covers the Midlands, South, North, and some are Unknown. (The spread is also true for Interview with DO.) Not tied to any region, it does not appear that the 3<sup>rd</sup> person zeroes can be tied to any single dialect. The BNC is restricted to British English, but the 3<sup>rd</sup> person zeroes may point to a possible vernacular universal involving levelling of the verb form (see section 2.13), although much more evidence from Inner Circle English would need to be gathered to investigate this.

#### 4.3.3. Third person singular present tense forms in the BNC Spoken components, by domain.

In the BNC header information for the Demographic files, no domain is given. This component of the BNC consists of everyday conversations which are considered distinct from the Business and Leisure domains, which are part of the Context-governed component. In that component, there are four domains: Public or Institutional; Leisure; Educational and Informative; and Business.<sup>119</sup> Table 12 shows the domains, and the number of third person singular present tense forms for each.<sup>120</sup> For the *-s* endings, only 10% of them were examined, as documented above in Table 10. An estimated number of *-s* endings per domain was extrapolated from that same sample of 10%.<sup>121</sup> For instance, 420 out of 1,421 *he/she/it* + *-s* endings were found in the Public or Institutional domain, which becomes an estimate of 4,200 (ten times more) out of 14,210 for Public or Institutional in the Context-governed component.<sup>122</sup> Table 12 reveals that the 3<sup>rd</sup> person zeroes are spread across the domains, and no domain has a high percentage of them.

---

<sup>119</sup> The domains are given in Hoffmann et al. (2008: 33, Table 3.4); and online (Burnard (ed.) 2007: section 1.5.2.3, Table 16).

<sup>120</sup> For each hit, it involves looking up the header information for the file it appears in.

<sup>121</sup> 10% of each Spoken component was sampled (10% Demographic and 10% Context-governed). See Table 10, note 107.

<sup>122</sup> Logically, 14,210 is the same number for 'Total not including Conversation' in the event type table (Table 11).

Table 12. Third person singular present tense forms (of lexical verbs and DO) in the BNC Spoken Context-governed component, by domain.

| <b>Domain</b>               | <b>No. of<br/><i>he/she/it</i> + -s<br/>endings</b> | <b>No. of<br/><i>he/she/it</i> +<br/>zeroes</b> | <b>Total of<br/><i>he/she/it</i> +<br/>present tense<br/>verb forms</b> | <b>% of forms that<br/>are <i>he/she/it</i> +<br/>zeroes</b> |
|-----------------------------|---|---|---|--|
| Public or Institutional     | 4,200   | 136   | 4,336   | 3.14   |
| Leisure                     | 2,570   | 27  | 2,597   | 1.04   |
| Educational and Informative | 4,300   | 26  | 4,326   | 0.6  |
| Business                    | 3,140   | 18  | 3,158   | 0.57   |
| Total                       | 14,210  | 207   | 14,417  | 1.44   |

Some domains are comparable with domains from the ELF corpora: some of the VOICE domains (Table 7) and the all-Educational ELFA (Table 2), but the comparisons show what has already been established, that is, the percentages of 3<sup>rd</sup> person zeroes are much lower in the Context-governed component than in the ELF corpora.

#### 4.3.4. The BNC Written component.

The ELF corpora are spoken corpora, and have therefore been compared with spoken BNC data. A cursory examination was undertaken of the BNC Written component, just enough to see the level of its percentage of *he/she/it* + zeroes in comparison with the other corpora and components. Written language is expected to be more stable and standard (see sections 2.13 and 2.14) than spoken. Table 13 shows the search strings and hits.

Table 13. *He/she/it* + present tense forms (of lexical verbs and DO) in the BNC Written component (zero forms in bold).

| Form of verb                        | Search string | Hits         |
|-------------------------------------|---------------|--------------|
| <i>He</i> + verb -s                 | he _VVZ       | 44,423       |
| <i>She</i> + verb -s                | she _VVZ      | 16,213       |
| <i>It</i> + verb -s                 | it _VVZ       | 61,591       |
| <i>He</i> + verb 0                  | he _VVB       | <b>552</b>   |
| <i>She</i> + verb 0                 | she _VVB      | <b>278</b>   |
| <i>It</i> + verb 0                  | it _VVB       | <b>595</b>   |
| <i>He does</i>                      | he _VDZ       | 3,913        |
| <i>She does</i>                     | she _VDZ      | 1,509        |
| <i>It does</i>                      | it _VDZ       | 7,935        |
| <i>He do</i>                        | he _VDB       | <b>74</b>    |
| <i>She do</i>                       | she _VDB      | <b>78</b>    |
| <i>It do</i>                        | it _VDB       | <b>79</b>    |
| Total -s endings                    |               | 135,584      |
| Total 3 <sup>rd</sup> person zeroes |               | <b>1,656</b> |
| Total forms                         |               | 137,240      |

There are 1,656 3<sup>rd</sup> person zeroes, which is 1.21% of the forms. None of the hits was verified, so the percentage can be considered a maximum. As expected, this is a lower percentage of the non-standard form than in any of the spoken corpora (Figure 10). As the VOICE Frequently Asked Questions page states, ‘Spoken interactions are immediate and at a remove from the stabilizing and standardizing influence of writing.’

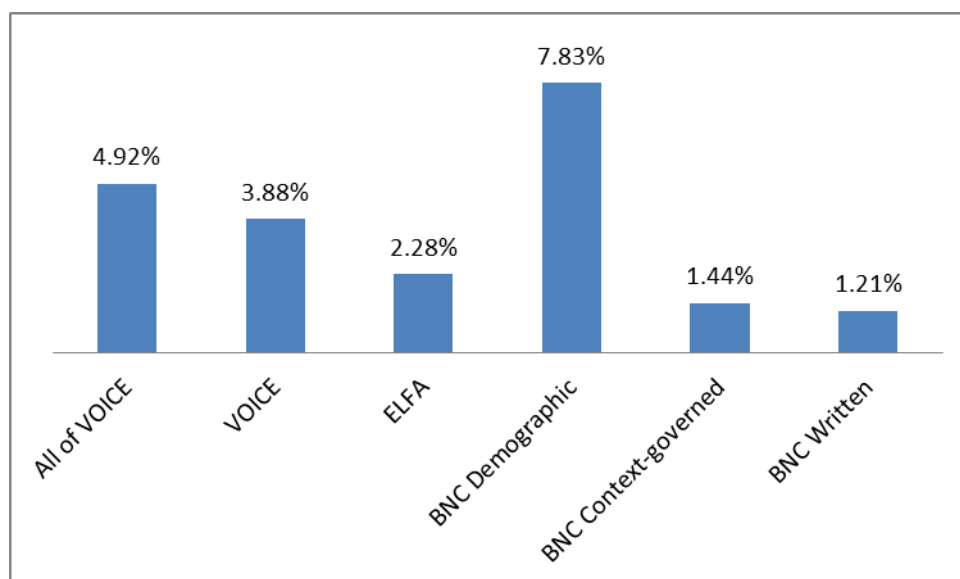


Figure 10. Percentages of third person singular present tense forms (of lexical verbs and DO) that are 3<sup>rd</sup> person zeroes, in VOICE, ELFA, and the BNC components. These are 3<sup>rd</sup> person zeroes in constructions of the kind *he/she/it* + verb, except ‘All of VOICE’, which represents all the 3<sup>rd</sup> person zeroes of lexical verbs and DO in VOICE. Data from sections 4.2.1, 4.2.2, 4.3.4, and Table 11.

#### 4.4. The learner language corpus, LINDSEI.

##### 4.4.1. The 3<sup>rd</sup> person zero in LINDSEI.

As explained in section 3.7, LINDSEI was tagged by me using CLAWS7. This gave me the advantage of being able to use the same search strings I used for ELFA (see 4.2.2 for details). 3<sup>rd</sup> person zeroes were obtained from LINDSEI by searching for VV0 and VD0 (the base form)<sup>123</sup> following the pronouns *he*, *she*, and *it*. These searches were conducted using WordSmith. Contractions (e.g. *she wanna*<sup>124</sup>) appeared among the hits. The VVZ and VDZ (-s ending) hits were checked for correct tagging, and were shown to be correct, apart from occasional instances, for example:

- 55      sheep yes and they s= (er) <name of person> said that . well he called *it sheepses* you know that sheep is you know sheep is (er) you know uncountable [LINDSEI, file PL017, complete sentence.]<sup>125</sup>

<sup>123</sup> Searches were run to check that no VV0 (the base form of a verb) was mis-tagged as VVI (the infinitive form), or VD0 (the base form of DO) as VDI (the infinitive form of DO), and none was.

<sup>124</sup> In file JP034.

<sup>125</sup> There are no line numbers in LINDSEI. Excerpts are often quoted, rather than full sentences, because of their length. ‘Filled pauses and backchannelling are enclosed in brackets’ (LINDSEI handbook 2010: 14). ‘Incomplete words are immediately followed by an equals sign’ (LINDSEI handbook 2010:15). ‘To



Here *sheepses* has been mis-tagged by CLAWS7 as a verb; insofar as it is a word form at all, it is a noun. Other incorrect tagging included the occasional tagging of markup for contextual information (CLAWS7 did not often tag this), like *breathes* in this example:

- 56 if you want to go for a swim you can still do *it* <*breathes* in> [LINDSEI, file SW044, excerpt from sentence.]

As described in section 3.5.2, LINDSEI includes both interviewer speech ('A turns') and interviewee speech ('B turns'). Only the speakers in the B turns are learners, so only B turns count as learner language. All speech from A turns had to be removed from the hits that were obtained, whether they were -s endings or 3<sup>rd</sup> person zeroes. There are even instances in file CH049 where the interviewer and interviewee discuss the 3<sup>rd</sup> person zero, and the interviewer repeats the example *he go to school* three times. One interviewer also used the 3<sup>rd</sup> person zero in more natural speech:

- 57 and also you don't know what *she think* about this friendship right [LINDSEI file CH023, complete sentence.]

I read through all 4,402 hits to exclude A turns such as this, as well as excluding data for the usual reasons (see section 4.1.2). The valid 3<sup>rd</sup> person zeroes were mostly found to be typical, for example:

- 58 I've seen him in: . in: . a lot mo= a lot of movies and . (er) some roles *he play* are very . good [LINDSEI file BG007, excerpt from sentence.]<sup>126</sup>

Table 14 shows the search strings and the hits.

---

preserve anonymity the proper names mentioned in the interviews have been replaced with substitutes such as <first name of interviewee>' (LINDSEI handbook 2010: 16).

<sup>126</sup> A colon indicates that the last syllable is lengthened (see LINDSEI handbook 2010: 16). A single dot between words represents a pause of less than one second (see LINDSEI handbook 2010: 14).

Table 14. *He/she/it* + present tense forms (of lexical verbs and DO) in LINDSEI (zero forms in bold).

| Form of verb                        | Search string   | Hits (A and B turns) | B turns verified as this form |
|-------------------------------------|-----------------|----------------------|-------------------------------|
| <i>He</i> + verb -s                 | he_PPHS1 *_VVZ  | 845                  | 805                           |
| <i>She</i> + verb -s                | she_PPHS1 *_VVZ | 1,305                | 1,236                         |
| <i>It</i> + verb -s                 | it_PPH1 *_VVZ   | 907                  | 670                           |
| <i>He</i> + verb 0                  | he_PPHS1 *_VV0  | 264                  | <b>258</b>                    |
| <i>She</i> + verb 0                 | she_PPHS1 *_VV0 | 230                  | <b>228</b>                    |
| <i>It</i> + verb 0                  | it_PPH1 *_VV0   | 73                   | <b>42</b>                     |
| <i>He does</i>                      | he_PPHS1 *_VDZ  | 139                  | 125                           |
| <i>She does</i>                     | she_PPHS1 *_VDZ | 374                  | 345                           |
| <i>It does</i>                      | it_PPH1 *_VDZ   | 222                  | 143                           |
| <i>He do</i>                        | he_PPHS1 *_VD0  | 10                   | <b>10</b>                     |
| <i>She do</i>                       | she_PPHS1 *_VD0 | 22                   | <b>22</b>                     |
| <i>It do</i>                        | it_PPH1 *_VD0   | 11                   | <b>0</b>                      |
| Total -s endings                    |                 |                      | 3,324                         |
| Total 3 <sup>rd</sup> person zeroes |                 |                      | <b>560</b>                    |
| Total forms                         |                 | 4,402                | 3,884                         |

The percentage of the total number of forms that are 3<sup>rd</sup> person zeroes is 14.42%. This is the highest percentage from any of the corpora investigated (Figure 11).

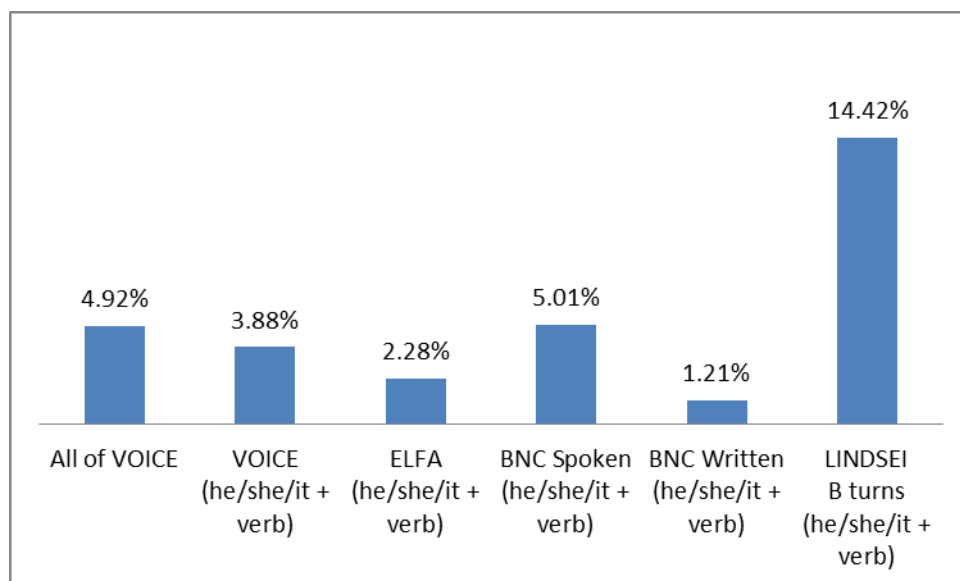


Figure 11. Percentages of third person singular present tense forms (of lexical verbs and DO) that are 3<sup>rd</sup> person zeroes, in VOICE, ELFA, the BNC, and LINDSEI (B turns). These are 3<sup>rd</sup> person zeroes in constructions of the kind *he/she/it + verb*, except ‘All of VOICE’, which represents all the 3<sup>rd</sup> person zeroes of lexical verbs and DO in VOICE. Data from sections 4.2.1, 4.2.2, 4.3.1, 4.3.4, and Table 14.

The prevalence of 3<sup>rd</sup> person zeroes in the learner corpus, far beyond that of the ELF corpora, is an interesting discovery. It was expected that learners would produce more 3<sup>rd</sup> person zeroes than NSs (see section 2.15), but not necessarily more than users of ELF. These are higher intermediate to advanced learners of English as a Foreign Language (EFL) (LINDSEI handbook 2010: 10), so at first glance this shows quite a difference between learners of EFL and users of ELF (see section 2.7).

Along with the percentages of the ELF corpora being close together, if there is a large percentage difference between the ELF corpora and the percentage of the learner corpus, a case for the language in ELF being somewhat different to both native speech and learner language could be made. However, a comparison between the ELF corpora and LINDSEI by L1 sheds a different light on the matter.

#### 4.4.2. The 3<sup>rd</sup> person zero in LINDSEI, by L1.

While it is not difficult to calculate the percentage of third person singular present tense forms that are 3<sup>rd</sup> person zeroes in the construction *he/she/it + verb* for speakers of each L1 in LINDSEI, this was not feasible for VOICE and ELFA (see section 4.2.4, note 62), so for comparison, only a coefficient of *he/she/it + zeroes* to the number of words per L1 in LINDSEI is calculated, as shown in Table 15. For more about how Table 15 was constructed, see section 3.5.3 on how LINDSEI is divided by L1.

Table 15. *He/she/it* + zeroes (of lexical verbs and DO) in LINDSEI (B turns), by L1.

| A                           | B                                 | C   | D  |
|-----------------------------|-----------------------------------|---|--|
| L1 group                    | No. of words in LINDSEI (B turns) | No. of <i>he/she/it</i> + zeroes in LINDSEI (B turns) | Coefficient of no. of 3 <sup>rd</sup> person zeroes to no. of words ( $C / B \times 1 \text{ million}$ ) |
| Chinese                     | 63,542                            | 210   | 3,304.9  |
| Japanese                    | 37,126                            | 146   | 3,932.55   |
| Romance <sup>127</sup>      | 214,819                           | 128   | 595.85   |
| Greek                       | 75,998                            | 31  | 407.91   |
| Germanic <sup>128</sup>     | 237,406                           | 29  | 122.15   |
| Balto-Slavic <sup>129</sup> | 162,290                           | 15  | 92.43  |
| Arabic                      | 960                               | 1   | 1,041.67   |
| Total                       | 792,141                           | 560   | 706.94   |

There are L1s in LINDSEI that produce many of the 3<sup>rd</sup> person zeroes, L1s which were not well represented by number of words in the ELF corpora.<sup>130</sup> Without these two L1s, Chinese and Japanese, LINDSEI is not as dramatically different from the NS and ELF corpora, as shown in Table 16. (The Chinese and Japanese languages are discussed in section 6.3.)

<sup>127</sup> French 91,402 + Italian 59,573 + Spanish 63,844 = 214,819.

<sup>128</sup> Dutch 79,652 + German 85,950 + Swedish 71,804 = 237,406.

<sup>129</sup> Bulgarian 69,169 + Polish 93,121 = 162,290.

<sup>130</sup> Chinese L1s are 5,845 words (0.57%) of VOICE, and 7,667 words (0.7%) of ELFA. Japanese L1s are 1,276 words (0.12%) of VOICE, and 6,720 words (0.6%) of ELFA.

Table 16. *He/she/it* + present tense forms (of lexical verbs and DO) following *he*, *she*, and *it*, in LINDSEI (B turns), divided into three L1 groups.

| <b>L1</b> | <b>No. of -s endings</b> | <b>No. of 3<sup>rd</sup> person zeroes</b> | <b>Total of third person singular present tense forms</b> | <b>% of forms that are 3<sup>rd</sup> person zeroes</b> |
|-----------|--------------------------|--|---|---|
| Chinese   | 124                      | 210  | 334   | 62.87   |
| Japanese  | 96                       | 146  | 242   | 60.33   |
| All other | 3,104                    | 204  | 3,308   | 6.17  |
| Total     | 3,324                    | 560  | 3,884   | 14.42   |

The percentage of *he/she/it* + zeroes in LINDSEI without Chinese and Japanese L1s drops to 6.17%. This is still a higher percentage than ELF, but the huge difference (Figure 11) is accounted for. An ELF corpus with a greater number of Chinese and Japanese L1s would be better for comparison with LINDSEI. It is of interest to this thesis if there is a difference in non-standard usage between higher intermediate to advanced learners and people speaking in ELF situations (see section 2.11), but with 6.17%, the difference is only by a couple of percentage points.

In terms of the Balto-Slavic, Germanic, and Romance L1 groups encountered both in LINDSEI and the ELF corpora, the LINDSEI Romance coefficient is, as in the ELF corpora, the highest of the three. The Balto-Slavic and Germanic coefficients from LINDSEI slot in to the middle of the rankings in Figure 12, instead of occupying the high end, another sign that the learner corpus may not be as different from the ELF corpora as it first seemed.

(Also see section 6.3.)

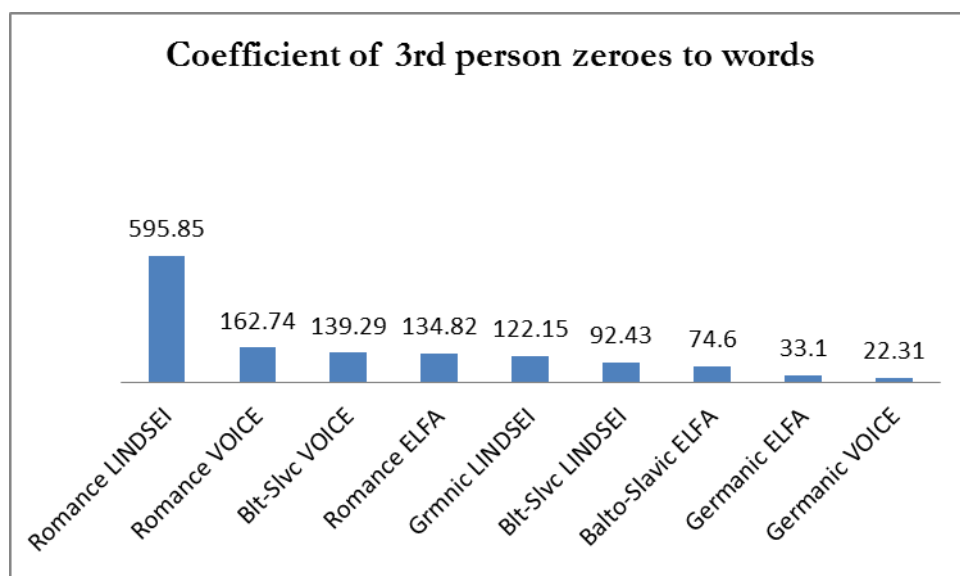


Figure 12. Ranking of coefficients of *he/she/it* + zeroes (of lexical verbs and DO) to words, among some L1 groups, in VOICE, ELFA, and LINDSEI (B turns). Data from Tables 3, 4, and 15.

#### 4.4.3. The 3<sup>rd</sup> person zero in LINDSEI, by event type and domain.

All of LINDSEI is one event type, ‘informal interview’ (LINDSEI handbook 2010: 3), however, a comparison of it with the Interview event types of VOICE and the BNC Spoken Context-governed component does not alter what has already been gleaned from the earlier comparison of event types (section 4.3.2, Figure 9), and the comparison between the corpora (section 4.4.1, Figure 11).

LINDSEI is all in the educational domain. A comparison between it and the Educational domains of other corpora (VOICE; ELFA; the BNC Spoken Context-governed component) did not add to what has already been discovered.

Section 6.4 deals generally with the event type and domain of LINDSEI.



## Chapter 5. Corpus investigation of the relative pronouns *who* and *which*.

### 5.1. Introduction.

The interchange of the relative pronouns *who* and *which* was introduced in chapter 2. Two examples are:

59      er are there any er *machines who* make photos [VOICE, file EDsve423, line 458, complete.]<sup>131</sup>

60      *rock stars* in your country *which* are very famous [VOICE, file PBmtg463, excerpt from line 1647.]

In the first example, the antecedent<sup>132</sup> is inanimate, so in standard usage *which* would be used instead of *who*. In the second example, the antecedent is animate, so in standard usage *who* would be used instead of *which*. This chapter involves the investigation of corpora for this non-standard usage. I describe and compare the interchange of *who* and *which* in the ELF corpora, VOICE and ELFA (section 5.2); the native speaker (NS) corpus, the BNC (5.3); and the English as a Foreign Language (EFL) learner corpus, LINDSEI (5.4), all of which were described in chapter 3. An additional part of the investigation (5.5) is the examination of *who* and *which* with ‘collective antecedents’, to find out whether in the ELF corpora in such cases there is a greater preference for *which* than in other corpora, as discussed in section 2.17.5.

#### 5.1.1. Data that was included.

At the outset, it had to be decided how to extract an adequate number of examples from the corpora. None of them is tagged for non-standard usage of relative pronouns, so searches had to be devised that would reveal it. I elected to examine all instances of the words *who* and *which* when they were directly preceded by a noun. This is not to say that non-standard usage will only follow a noun, but it is a likely place where it will be found. The searches being restricted in this way, they did not obtain constructions where, for instance, the antecedents were pronouns.

---

<sup>131</sup> All indented examples from corpora in this chapter are numbered, and the first number in this chapter is 59. The italics are added in all examples. They are to highlight the relative pronoun (e.g. *who*) and the key word (*machines*) in the antecedent (*any... machines*). All examples from VOICE are quoted from the text files of the untagged version (VOICE2.0XML). The text files derived from the tagged version (VOICEPOXML2.0) include, for example, indications of pauses between words, such as *\_0* which indicates a brief pause (explained in VOICE’s README file).

<sup>132</sup> ANTECEDENT is explained in section 2.17.1.



Once the data was collected, I read through the results to establish that I was only working with the words *who* and *which* as relative pronouns. Mostly when directly following a noun, this was the case, and as I had hoped, that noun was usually the antecedent. Examples of standard usage are presented in section 5.1.3, and examples of non-standard usage are presented when I discuss each corpus. I also included in the data instances of *which* when the antecedent was an entire clause (see section 2.17.2) that happened to end in a noun, for example:

- 61     Lightweight silky curtains reappeared as pyjamas, nightgowns, underwear and even wedding dresses *which* answers your question about wedding dresses. [BNC Spoken Context-governed, file D8Y, line 418, complete.]

The reason for including instances like this is it was not feasible for this study to verify, through reading the surrounding context, that each and every apparent noun antecedent of *which*<sup>133</sup> is not instead part of a clause that ends in a noun, and the clause is the real antecedent. When antecedents are clauses they, after all, count as standard uses of *which* as a relative pronoun, so it seems harmless to include them, although these instances were not collected systematically, that is, I gathered only the clauses that ended in nouns. The most accurate description of the data included is: all instances of the relative pronoun *who* with antecedents that are directly-preceding nouns, and the relative pronoun *which* with antecedents that are directly-preceding nouns or directly-preceding clauses that end with nouns.

#### 5.1.2. Data that was excluded.

As described in section 2.17.4, *who* and *which* can be used as interrogative pronouns. As expected, the search strings produced hits that were instances of interrogative pronouns following nouns, mostly in indirect questions, as well as the use of *which* as an interrogative determiner, incorrectly tagged as a relative pronoun. These were excluded. I also had to exclude some data even when the relative pronoun was being used. This is illustrated in the next example.

- 62     i think that there are many of *us* in this room *who* have erm possibilities [VOICE, file PRpan225, excerpt from line 126.]

The antecedent is the personal pronoun *us*. It is not the noun. While examples such as this represent the standard use of the relative pronoun, I excluded them from the data because they were few (three or fewer per corpus), and not gathered in a systematic way.

There were various other reasons to exclude hits, not all of which can be detailed here, but one reason is an ANACOLUTHON (plural ANACOLUTHA), ‘a syntactic break in the expected grammatical

---

<sup>133</sup> 971 for VOICE, 2,091 for ELFA, 8,529 for the BNC Spoken components, and 342 for LINDSEI.

sequence within a sentence, as when a sentence begins with one construction and remains unfinished, e.g. *The man came and – are you listening?* (Crystal (ed.) 2003: 23). An ELF example:

- 63      who will benefit in one (xx) you wrote like who will benefit on the e-governors on the (implementation) (xx) in africa *who* will lose actually this is the quest- question you are you ask [ELFA, file USEMD04A, excerpt from sentence.]

The word *africa* is the end of one syntactic unit and *who* (as an interrogative pronoun) is the beginning of another. On the subject of anacolutha, the BNC presented its own kind of problem, with apparent anacolutha, like this one:

- 64      If she's coming tomorrow afternoon *Who?* [BNC Spoken Demographic, file KB2, line 2252, complete.]

That is from the BNC 'Query Result' screen. The BNC 'Corpus Display' screen is elucidatory:

- Alec    2251 go out to Johnny's early tomorrow won't we?  
           2252 If she's coming tomorrow afternoon  
 Joyce   2253 Who?  
 Alec    2254 Who, Denise

It is not an anacoluthon, but an entirely different sentence by a different speaker, with *who* as an interrogative pronoun in a direct question. Even when a pronoun was relative, I excluded the data if the construction was spread over two speakers:

- 65      [Unknown speaker] ... there was also a mention of, of an income rise in the spring  
           [Speaker PS46N] *Which* I made a note of.  
           [BNC Spoken Context-governed, file JJP, lines 526 (excerpt) and 527 (complete).]

### 5.1.3. Standard usage.

- 66      imagine you have an *addressee who* is not at the end of the day with the project [VOICE, file POWgd243, excerpt from line 255.]  
 67      that is the crucial *achievement which* will bear fruit in the near future [ELFA, file UDEFD030, excerpt from sentence.]

In this study, usage of *who* and *which* as relative pronouns has to be considered either standard or non-standard. In order to count the standard and non-standard uses of *who* and *which*, each included hit has to be considered to be either one or the other. Some standard uses were not as easy to spot as the two examples above. The basis for deciding what was standard or non-standard was English grammar as discussed in section 2.17, but I also used my intuition as an

NS<sup>134</sup> to a degree. The next example shows where some thought was required before coming to a decision.

- 68      And there was a *picture who* had fallen off one of the lorries in Bosnia erm one of the refugee lorries and was running along trying to catch up with her parents. [BNC Spoken Context-governed, file FMK, line 445, complete.]

There is nothing about the context that indicates that *picture* is the antecedent. In fact the antecedent is missing. It seems to me that the missing sense, ‘picture of a girl’, unspoken, was supposed to be understood by the listener. I accepted it as standard.

As expected from section 2.17.2, I encountered in the corpora, and accepted as standard: animals considered animate; the ‘human babies’ exception to animacy; *which* as an attributive characterization complement; and the relative pronoun used in a standard way while the verb is not. Examples from the corpora are presented in section 2.17.2.

#### 5.1.4. Non-standard usage.

Whenever there was any indication of the use of *which* with an animate antecedent, or *who* with an inanimate one, meaning non-standard usage, both the sentence and its context were inspected carefully to ensure that this was the case. The instances of non-standard usage are examined in each of the corpora in the next sections.

### 5.2. The ELF corpora, VOICE and ELFA.

#### 5.2.1. *Who* and *which* in VOICE.

I searched the tagged version of VOICE 2.0. As mentioned above, I sought *who* and *which* directly following nouns. I did not discover a search string for VOICE that would produce *only* collocations of the relative pronoun following a noun. I settled instead on two search strings that produced *all* instances of each relative pronoun: ‘who PRE’ and ‘which PRE’. I searched for these using WordSmith.<sup>135</sup> PRE is the tag in VOICE for a relative pronoun.<sup>136</sup> There were 1,046 hits for *who*, and 2,254 for *which*.

I sorted each set of hits by the word preceding the relative pronoun, then I manually excluded all the hits where the relative pronoun followed something other than a noun. Apart from other

---

<sup>134</sup> NATIVE SPEAKER (NS) is defined in section 2.1, note 4.

<sup>135</sup> This concordancer is described in section 3.6.

<sup>136</sup> The VOICE tagset is in its README file.

parts of speech, this also meant that hits were excluded if the preceding word was breathing (tagged BR), a foreign word (FW), laughter (LA), a pause (PA), a response particle (RE), an interjection (UH), unintelligible speech (UNI), or a partial word (XX).

Whenever there was doubt as to what the antecedent was, I checked both the sentence and its context in the ‘source text’ screen or in the original text file.

Out of 1,046 hits for the relative pronoun *who*, 425 were excluded. From the remaining 621, there were 612 standard uses of *who*, and 9 non-standard uses of *who*. One of them is example 59 above. That and others were straightforward, but some required more thought, for example:

- 69        yeah it's a it's a mean to interest people create an *identity who*... yeah enable people to like say okay this is my university i care about my university and i want you to act in this university [VOICE, file EDwsd499, lines 396 and 398, complete (back-channelling from another speaker removed).]

My sense of this is that *an identity which enables* is meant, and *who* can thus be considered a non-standard choice of relative pronoun. For the purposes of counting, I had no choice but to consider such instances either standard or non-standard.

Out of 2,254 hits for the relative pronoun *which*, 1,283 were excluded. Out of the remaining 971, there were 950 standard uses of *which*, and 21 non-standard uses of *which*. Many were straightforward examples, such as example 60 above. Some of the examples required some consideration, for instance:

- 70        erm another from which is a a local *agent* say in amsterdam *which* is called [org18] one person [VOICE, file PBmtg300, line 857, complete.]

Even though the agent has a depersonifying organization name ([*org18*]), the agent is clearly a person (*one person*), therefore animate.

Table 17 shows the number and percentage of standard and non-standard uses in VOICE.

Table 17. The relative pronouns *who* and *which*, with antecedents that are directly-preceding nouns or directly-preceding clauses that end with nouns, in VOICE.

| Relative pronouns | No. of standard uses | No. of non-standard uses | Sum          |
|-------------------|----------------------|--------------------------|--------------|
| <i>Who</i>        | 612 (98.55%)         | 9 (1.45%)                | 621 (100%)   |
| <i>Which</i>      | 950 (97.84%)         | 21 (2.16%)               | 971 (100%)   |
| Total             | 1,562 (98.12%)       | 30 (1.88%)               | 1,592 (100%) |

### 5.2.2. *Who* and *which* in ELFA.

As explained in section 3.7, ELFA was tagged by me with CLAWS7. For my tagged version of ELFA, I was able to devise search strings that allowed me to obtain all instances of each relative pronoun directly following any noun, using WordSmith: ‘NN\* who’ and ‘NN\* which’. This meant that unlike VOICE, ELFA did not produce very many hits with other parts of speech preceding *who* or *which* that had then to be excluded. I obtained 672 hits for *who*, and 2,110 for *which*. Whenever there was doubt as to what the antecedent was, I checked the wider context in the ‘source text’ screen or the original text file.

Out of 672 hits for *who*, 30 were excluded. From the remaining 642, there were 635 standard uses of *who*, and 7 non-standard uses of *who*. Here is an example:

- 71      i've got some information about organisations involved in the lives of the social socially excluded as well as some people's *details who* i can ask for some help [ELFA, file USEMD04A, excerpt from sentence.]

While it could be argued that the speaker intended the antecedent to be *people*, grammatically the antecedent is *details*, which is inanimate. As I have to treat the usage as either standard or non-standard, I count this as non-standard instead of a ‘grey area’.

Out of 2,110 hits for *which*, 19 were excluded. From the remaining 2,090, there were 2,072 standard uses of *which*, and 19 non-standard uses of *which*. Here is an example:

- 72      there's one particular *author which* you can strongly associate with this kind of thinking [ELFA, file ULEC210, excerpt from sentence.]

The most (or least) entertaining example was where the animacy of the antecedent can only be understood from reading six lines of exchange between the three speakers, who are identified as S11, S6, and S10:

- 73      <S11> what is the marital status of er *female politicians* are they married unmarried or widows </S11>
- <S6> er the the what i have i believe </S6>
- <S10> the PhD ones [and the doctors] </S10>
- <S6> [yeah the @doctor@] @okay@ </S6>
- <S10> are they married </S10>
- <S6> yeah the doctoral *ones* in the latest parliaments *which* i have it's er it's interesting that still they're less in technical fields [ELFA, file CDIS090.]<sup>137</sup>

Table 18 shows the number and percentage of standard and non-standard uses in ELFA. Figure 13 shows that in the ELF corpora, the frequency is very low for non-standard usage.

Table 18. The relative pronouns *who* and *which*, with antecedents that are directly-preceding nouns or directly-preceding clauses that end with nouns, in ELFA.

| Relative pronouns | No. of standard uses | No. of non-standard uses | Sum          |
|-------------------|----------------------|--------------------------|--------------|
| <i>Who</i>        | 635 (98.91%)         | 7 (1.09%)                | 642 (100%)   |
| <i>Which</i>      | 2,072 (99.09%)       | 19 (0.91%)               | 2,091 (100%) |
| Total             | 2,707 (99.05%)       | 26 (0.95%)               | 2,733 (100%) |

<sup>137</sup> @ indicates laughter. The square brackets indicate overlapping speech. These are explained in the ELFA transcription guide pdf file.

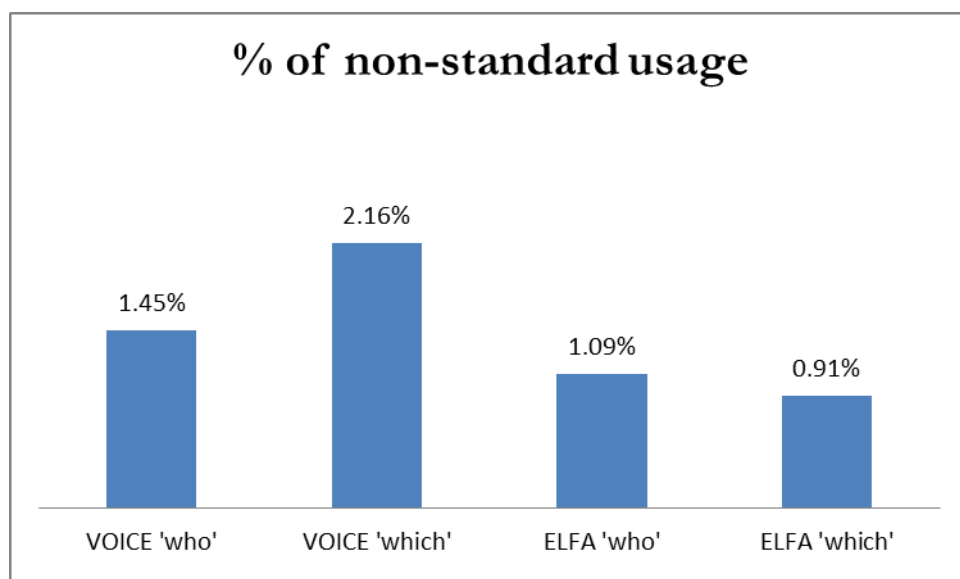


Figure 13. Percentages of usage of the relative pronouns *who* and *which* (with antecedents that are directly-preceding nouns or directly-preceding clauses that end with nouns) that is non-standard, in ELF corpora (VOICE and ELFA). Data from Tables 17 and 18.

### 5.2.3. Non-standard *who* and *which* in VOICE and ELFA, by L1.

It was possible to discover the L1<sup>138</sup> of the speaker of each non-standard use of *who* and *which* following a noun or a clause ending in a noun in VOICE and ELFA; but it was not feasible for this study to discover the L1 of the speaker for each standard use,<sup>139</sup> therefore the data in this section is restricted to non-standard usage by L1. The L1 data is presented in two tables: one for VOICE (Table 19) and one for ELFA (Table 20).

The non-standard uses of the relative pronouns *who* and *which* in VOICE were spoken by speakers with 16 different L1s, which is unwieldy for analysis, so I divided the L1s into language groups. Languages were grouped together based on the nearest branch of languages to them within their language family. Three groups were formed this way: Germanic (Danish, Dutch, and German), Balto-Slavic (Bulgarian, Croatian, Latvian, Polish, Serbian, and Slovenian), and Romance (French, Italian, and Spanish). I grouped two by language family, Macro-Altaic (Korean and Turkish). The final two were single languages that could not be grouped: Maltese and English. The latter is a Germanic language, but considering the subject of this thesis, NS English

<sup>138</sup> L1 is defined in section 2.8.

<sup>139</sup> It involves examining hits for standard uses individually, with a process of several stages; for VOICE, 1,562 hits (Table 17), opening each file to find the speaker for each hit, then using that speaker's ID to find the L1 in the header of the relevant xml file; for ELFA, 2,707 hits (Table 18), opening each text file to find the hit, then the speaker ID, then the L1 in the header.

is examined separately. 7.07% of the speech in VOICE is by NS English speakers,<sup>140</sup> who are included as users of ELF, as defined in section 2.1. These 16 languages are the only ones for which 3<sup>rd</sup> person zeroes were recorded in the speech of their L1 speakers. Languages for which this is not the case are simply grouped as ‘other’ in Table 19.<sup>141</sup>

One of the non-standard uses of *which* was made by a speaker with two L1s, Maltese and English. The VOICE website provides a word count for each L1 represented in the corpus.<sup>142</sup> When the speaker had two L1s, the speaker was counted twice, once for each L1.<sup>143</sup> In keeping with the composition of those VOICE word counts, the aforementioned speaker was counted twice; the number of non-standard uses in Table 19 therefore adds up to 31, instead of 30 (the total in Table 17 was 30). The COEFFICIENT for each L1 group in Table 19 is the number of non-standard uses proportional to the number of words in VOICE that the L1 group has. The coefficients are therefore directly comparable with each other (and with any coefficients calculated from other corpora).

---

<sup>140</sup> All the L1s represented in VOICE 2.0 and the statistics for them can be seen online (VOICE, Statistics VOICE 2.0 Online: 2 First languages). The ISO 639-2 Language Codes are used, which can be viewed at <[http://www.loc.gov/standards/iso639-2/php/code\\_list.php](http://www.loc.gov/standards/iso639-2/php/code_list.php)>, with changes listed at <[http://www.loc.gov/standards/iso639-2/php/code\\_changes.php](http://www.loc.gov/standards/iso639-2/php/code_changes.php)>.

<sup>141</sup> See note 140.

<sup>142</sup> See note 140.

<sup>143</sup> This information is not on the VOICE website, but was communicated by VOICE to me via email (see section 4.2.4, note 67).



Table 19. Usage of the relative pronouns *who* and *which* (with antecedents that are directly-preceding nouns or directly-preceding clauses that end with nouns) that is non-standard in VOICE, by L1.

| A                           | B                        | C  | D  |
|-----------------------------|--------------------------|--|--|
| L1 group                    | No. of words in VOICE    | No. of non-standard uses of <i>who</i> and <i>which</i> in VOICE | Coefficient of no. of non-standard uses to no. of words ( $C / B \times 1 \text{ million}$ ) |
| Germanic <sup>144</sup>     | 416,404                  | 13   | 31.22  |
| Balto-Slavic <sup>145</sup> | 115,678                  | 7  | 60.51  |
| Romance <sup>146</sup>      | 121,126                  | 6  | 49.54  |
| Macro-Altaic <sup>147</sup> | 34,250                   | 2  | 58.39  |
| Maltese                     | 30,323                   | 2  | 65.96  |
| Native speakers of English  | 72,371                   | 1  | 13.82  |
| Other                       | 257,884                  | 0  | 0  |
| Total                       | 1,048,036 <sup>148</sup> | 31   | 29.58  |

In ELFA, the instances of non-standard *who* and *which* came from speakers with 14 different L1s between them. I divided these into 7 groups. Once again I started by grouping languages based on the nearest branch of languages to them within their language family. In this way, I formed the L1 groups Romance (Catalan, French, Italian, Romanian, and Spanish), Germanic (Danish, Dutch, and German), and Balto-Slavic (Czech and Russian). The remaining L1s were single languages that could not be grouped: Finnish, Bengali, Persian (a.k.a. Farsi), and Somali. These 14 languages are the only ones for which the non-standard usage in question was recorded in the

<sup>144</sup> Danish 55,851 + Dutch 107,421 + German 253,132 = 416,404.

<sup>145</sup> Bulgarian 6,978 + Croatian 8,566 + Latvian 14,373 + Polish 43,195 + Serbian 35,675 + Slovenian 6,891 = 115,678.

<sup>146</sup> French 36,047 + Italian 43,608 + Spanish 41,471 = 121,126.

<sup>147</sup> Korean 18,801 + Turkish 15,449 = 34,250.

<sup>148</sup> The first languages statistics given for VOICE 2.0 (see note 140) add up to this total. VOICE 2.0 gives its total word count elsewhere as 1,023,196 (VOICE, Statistics VOICE 2.0 Online: 1 Total numbers). The discrepancy must be because of speakers counted twice (as mentioned in section 5.2.3).

speech of their L1 speakers. Languages for which this is not the case are simply grouped as ‘other’ in Table 20, apart from NSs, who are listed separately.

One of the non-standard uses of *which* was made by a speaker with two L1s, Catalan and Spanish. In the L1 word counts for ELFA given on its website (ELFA, First languages represented in the ELFA corpus), whenever the speaker had two L1s, the speaker was counted twice, once for each L1.<sup>149</sup> In keeping with the composition of those ELFA word counts, the aforementioned speaker was counted twice; the number of non-standard uses in Table 20 therefore adds up to 27, instead of 26 (the total in Table 18 was 26). The coefficient for each L1 group is the number of non-standard uses proportional to the number of words in ELFA that the L1 group has.

---

<sup>149</sup> Initially prompted by my query (see section 2.1, note 6), the ELFA website gives this information: ‘When a speaker has reported more than one first language, that speaker’s tokens have been counted under each of those languages. Thus, the total number of tokens presented here are greater than in the corpus itself’ (ELFA, First languages represented in the ELFA corpus).

Table 20. Usage of the relative pronouns *who* and *which* (with antecedents that are directly-preceding nouns or directly-preceding clauses that end with nouns) that is non-standard in ELFA, by L1.

| A                           | B                                   | C   | D   |
|-----------------------------|-------------------------------------|---|---|
| L1 group                    | No. of words in ELFA <sup>150</sup> | No. of non-standard uses of <i>who</i> and <i>which</i> in ELFA | Coefficient of no. of non-standard uses to no. of words (C / B × 1 million) |
| Romance <sup>151</sup>      | 125,958                             | 9   | 71.45   |
| Germanic <sup>152</sup>     | 184,776                             | 6   | 32.47   |
| Balto-Slavic <sup>153</sup> | 83,289                              | 4   | 48.03   |
| Finnish                     | 301,632                             | 3   | 9.95  |
| Bengali                     | 13,722                              | 2   | 145.75  |
| Persian/Farsi               | 9,242                               | 2   | 216.4   |
| Somali                      | 12,194                              | 1   | 82.01   |
| Native speakers of English  | 53,609                              | 0   | 0   |
| Other                       | 272,909                             | 0   | 0   |
| Total                       | 1,057,331                           | 27  | 25.54   |

Section 2.11 mentioned claims for non-standard language in ELF not being influenced by L1s. While this particular non-standard usage is made by speakers with many different L1s, and therefore fits the description of being ‘shared’ by them (see section 2.11), the variation in the frequency of its occurrence among different L1 groups cannot rule out L1 influence. There are only a small number of 3<sup>rd</sup> person zeroes per group, but there seems to be a pattern that shows L1 influence. Analysis can be restricted to just the groups that have at least four non-standard

<sup>150</sup> See section 2.1, note 6. These statistics are online (ELFA, First languages represented in the ELFA corpus).

<sup>151</sup> Catalan 14,512 + French 37,918 + Italian 31,124 + Romanian 21,420 + Spanish 20,984 = 125,958.

<sup>152</sup> Danish 39,957 + Dutch 58,823 + German 85,996 = 184,776.

<sup>153</sup> Czech 13,384 + Russian 69,905 = 83,289.

uses (the top three groups of Tables 19 and 20). When the coefficients are ranked, a pattern emerges.

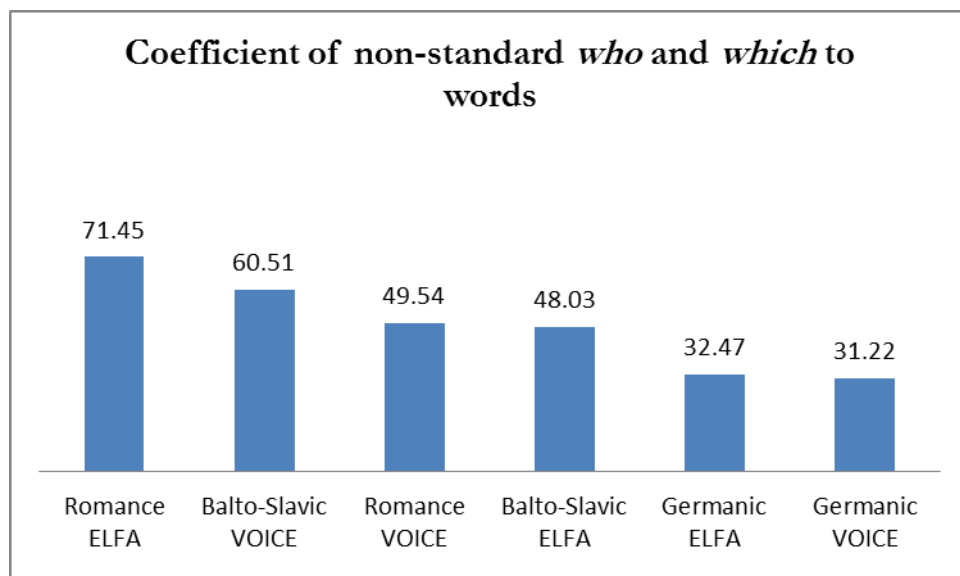


Figure 14. Ranking of coefficients of non-standard uses of the relative pronouns *who* & *which*, with antecedents that are directly-preceding nouns or directly-preceding clauses that end with nouns, to words per L1 group (with at least 4 non-standard uses per L1 group), in VOICE & ELFA. Data: Tables 19 & 20.

Within each corpus, the Romance and Balto-Slavic L1 groups have more non-standard usage of *who* and *which* than the Germanic group, and this aspect of the ranking is the same when both corpora are put together (Figure 14). All of these groups have higher coefficients than NSs in the corpora. With such consistency it is hard not to interpret this as L1 influence, particularly as the group with the lowest coefficient of the three groups is the Germanic group (in both cases Danish, Dutch, and German), the closest languages to English.

#### 5.2.4. *Who* and *which* in VOICE and ELFA, by event type.

The 3<sup>rd</sup> person zeroes in VOICE and ELFA were spoken in different kinds of lingua franca events. Data was collected on how non-standard *who* and *which* appear in the ELF corpora by event type, with the idea of looking for any patterns, or seeing if they are prominent in any event type. The event type data is set out in two tables: one for VOICE (Table 21) and one for ELFA (Table 22).

Each VOICE file is identified with a ‘Speech Event Type’,<sup>154</sup> of which there are ten. I sorted these into a manageable five categories:<sup>155</sup> Discussion; Meeting; Conversation; Interview / Press

<sup>154</sup> The VOICE ‘Speech Event Types’ are defined online (VOICE Corpus Information page). See also section 3.2.3.

conference / Question-answer session; and Service encounter, as can be seen in Table 21. The instances of both standard and non-standard *who* and *which* from the hits were cross-referenced by the files they appeared in, in a manual count (the event type of each VOICE file is included in its file name, e.g. *mtg* means Meeting).

Table 21. The relative pronouns *who* and *which*, with antecedents that are directly-preceding nouns or directly-preceding clauses that end with nouns, in VOICE, by event type.

| Event type  | No. of standard uses of <i>who</i> and <i>which</i> | No. of non-standard uses of <i>who</i> and <i>which</i> | Total uses | % of uses that are non-standard |
|---|---|---|------------|---------------------------------|
| Meeting <sup>156</sup>                                    | 551   | 14  | 565        | 2.48                            |
| Discussion <sup>157</sup>                                 | 775   | 11  | 786        | 1.4                             |
| Interview /<br>Press conference /<br>Q & A <sup>158</sup> | 103   | 3   | 106        | 2.83                            |
| Conversation <sup>159</sup>                               | 127   | 1   | 128        | 0.78                            |
| Service encounter <sup>160</sup>                          | 6   | 1   | 7          | 14.29                           |
| Total   | 1,562   | 30  | 1,592      | 1.88                            |

There are twelve different event types given for ELFA, but I have grouped these into three broader event types:<sup>161</sup> Discussion, Presentation, and Lecture, as can be seen in Table 22. The instances of both standard and non-standard *who* and *which* from the hits were cross-referenced by the files they appeared in, in a manual count (the event type of each ELFA file is included in its file name, e.g. *DIS* means Discussion<sup>162</sup>).

<sup>155</sup> See section 3.2.3.

<sup>156</sup> VOICE files with names beginning with PBmtg or POMtg.

<sup>157</sup> VOICE files with names beginning with EDsed, EDwgd, EDwsd, PBpan, POWgd, POWsd, PRpan, or PRwgd.

<sup>158</sup> VOICE files with names beginning with EDint, LEint, PBqas, POprc, PRint, and PRqas.

<sup>159</sup> VOICE files with names beginning with EDcon, LEcon, PBcon, POcon, or PRcon.

<sup>160</sup> VOICE files with names beginning with EDsve or PBsve.

<sup>161</sup> See section 3.3.3. The twelve event types are visible in the ELFA file 'ELFA\_index.xls'.

<sup>162</sup> The exception is UOTH010, where *OTH* just means other. In that case I had to look at the header of the file to see that it is a panel discussion.

Table 22. The relative pronouns *who* and *which*, with antecedents that are directly-preceding nouns or directly-preceding clauses that end with nouns, in ELFA, by event type.

| Event type                  | No. of standard uses of <i>who</i> and <i>which</i> | No. of non-standard uses of <i>who</i> and <i>which</i> | Total uses | % of uses that are non-standard |
|-----------------------------|---|---|------------|---------------------------------|
| Discussion <sup>163</sup>   | 1,498   | 20  | 1,518      | 1.32                            |
| Presentation <sup>164</sup> | 736   | 3   | 739        | 0.41                            |
| Lecture <sup>165</sup>      | 473   | 3   | 476        | 0.63                            |
| Total                       | 2,707   | 26  | 2,733      | 0.95                            |

Table 22 shows a difference in event types in ELFA, with the highest percentage of non-standard usage in the most informal<sup>166</sup> event type, Discussion. VOICE in Table 21 also shows a difference between event types, but in this corpus the most informal event type, Conversation, has the *least* non-standard usage (or, if Conversation is discounted as an overly dramatic percentage based on just a single non-standard use, Discussion is the most informal event type, and *it* has the least non-standard usage). This means no firm conclusion can be drawn, although the percentage for Discussion is almost the same for both corpora, which suggests the possibility of a continuum between the two, with more non-standard usage occurring in the event types that only appear in VOICE (this is addressed in section 6.4.1). It should be stated, however, that the high percentage for Service Encounter in VOICE can be discounted, as it is only based on a single instance of non-standard usage.

#### 5.2.5. *Who* and *which* in VOICE and ELFA, by domain.

All language in ELFA is in the educational domain. VOICE covers five domains: Professional organizational; Educational; Professional business; Professional research and science; and

<sup>163</sup> CDIS, UDEFD, ULECD, UOTH and USEMD files.

<sup>164</sup> CPRE, UDEFP and USEMP files.

<sup>165</sup> ULEC files (not including ULECD files).

<sup>166</sup> ‘Highly formal language involves carefully organized discourse, often with complex syntax and vocabulary, which closely follows the standard language... Highly informal language is very loosely structured, involving a high level of colloquial expression, and often departing from standard norms...’ (Crystal (ed.) 2003: 186).

Leisure.<sup>167</sup> The data on *who* and *which* in VOICE domains is set out Table 23. The uses of the relative pronouns were cross-referenced by the files they appeared in, in a manual count (the domain of each VOICE file is included in its file name, e.g. *PO* means Professional organizational).

Table 23. The relative pronouns *who* and *which*, with antecedents that are directly-preceding nouns or directly-preceding clauses that end with nouns, in VOICE, by domain.

| Domain                            | No. of standard uses of <i>who</i> and <i>which</i> | No. of non-standard uses of <i>who</i> and <i>which</i> | Total uses | % of uses that are non-standard |
|-----------------------------------|---|---|------------|---------------------------------|
| Professional business             | 445   | 12  | 457        | 2.63                            |
| Educational                       | 372   | 9   | 381        | 2.36                            |
| Professional organizational       | 488   | 6   | 494        | 1.21                            |
| Professional research and science | 167   | 3   | 170        | 1.76                            |
| Leisure                           | 90  | 0   | 90         | 0                               |
| Total                             | 1,562   | 30  | 1,592      | 1.88                            |

The rate of non-standard usage is a low percentage across the domains. Although there are differences between domains, (e.g. the percentage in Professional business is almost twice that of Professional organizational), no domain in VOICE has a high percentage of non-standard usage, therefore none stands out as an influencing factor. A comparison of the all-educational ELFA with the Educational domain of VOICE did not elucidate anything.

### 5.3. The NS English corpus, the BNC.

#### 5.3.1. *Who* and *which* in the BNC Spoken components.

<sup>167</sup> VOICE files with names beginning with, respectively, PO, ED, PB, PR, and LE. Each domain is defined online (VOICE Corpus Information page). See also section 3.2.4.

The BNC is chosen as the NS English corpus to compare with the ELF corpora.<sup>168</sup> The Spoken components were searched. Searches were conducted using BNCWeb, with search strings that would produce every instance of *who* or *which* following a noun: ‘\_NN\* who’ and ‘\_NN\* which’. This produced 6,536 hits for *who*, and 8,591 hits for *which*.

A technical fault in the BNC interface prevents a screen of 50 of the 6,536 hits for *who* from being viewable.<sup>169</sup> There may have been no data lost, but they are numbered hits, and count among the excluded when I state that out of 6,536 hits for *who*, 240 hits were excluded. From the remaining 6,296, there were 6,286 standard uses of *who*, and 10 non-standard uses of *who*. Here is one example:

- 74      Erm they're the they're there for a purpose and their size is there for a purpose in terms of er of the constrictions of the other road er sizing or whatever, and obviously huge *vehicles who* just can't possibly manoeuvre without going over. [BNC Context-governed, file FM1, line 397, complete.]

Out of 8,591 hits for *which*, 62 hits were excluded. From the remaining 8,529, there were 8,504 standard uses of *which*, and 25 non-standard uses of *which*. An example:

- 75      I knew er team mate Dean Bargger was doing particularly well scoring 11 points and er he's really a promising er *youngster which* I think we can get a lot of use out of, [BNC Spoken Context-governed, file KRT, excerpt from line 760.]

Table 24 shows the number and percentage of standard and non-standard uses in the BNC Spoken components.

Table 24. The relative pronouns *who* and *which*, with antecedents that are directly-preceding nouns or directly-preceding clauses that end with nouns, in the BNC Spoken components.

| Relative pronouns | No. of standard uses | No. of non-standard uses | Sum           |
|-------------------|----------------------|--------------------------|---------------|
| <i>Who</i>        | 6,286 (99.84%)       | 10 (0.16%)               | 6,296 (100%)  |
| <i>Which</i>      | 8,504 (99.71%)       | 25 (0.29%)               | 8,529 (100%)  |
| Total             | 14,790 (99.76%)      | 35 (0.24%)               | 14,825 (100%) |

<sup>168</sup> The BNC is described in section 3.4. It has its own terminology, such as ‘matches’ and ‘query string’, but I use ‘hits’ and ‘search string’, respectively.

<sup>169</sup> The error message is: ‘cqp: concordance.c:409: remember\_this\_position: Assertion ‘position\_list’ failed.’



My working hypothesis was that there was unlikely to be interchange between *who* and *which* in the BNC (section 2.17.5). As can be seen from Table 24, it turns out that non-standard usage is found, yet in extremely low percentages, all below 1%. There is more non-standard usage of *who* and *which* in the ELF corpora than in the BNC (Figure 15).

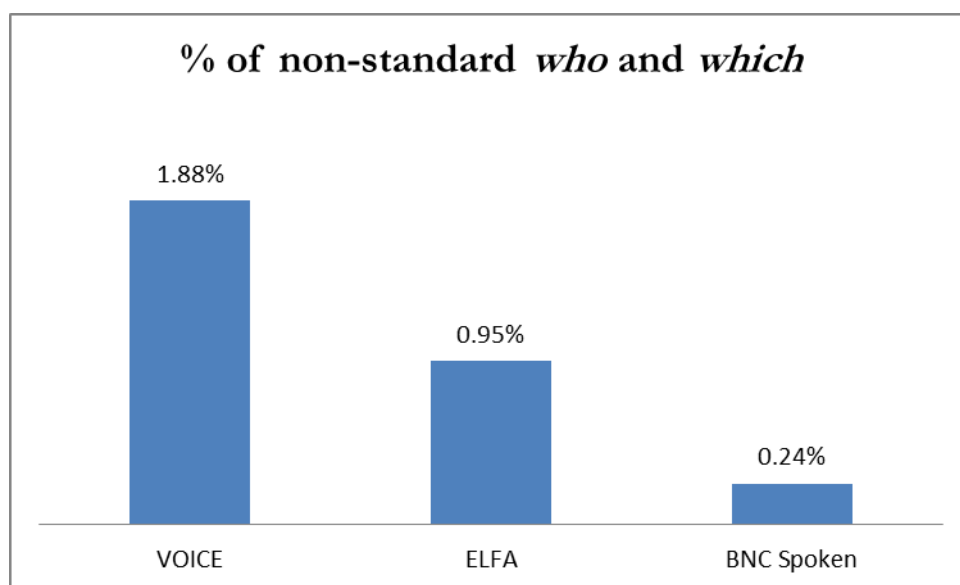


Figure 15. Percentages of usage of the relative pronouns *who* and *which* (with antecedents that are directly-preceding nouns or directly-preceding clauses that end with nouns) that is non-standard, in VOICE , ELFA, and the BNC Spoken components. Data from Tables 17, 18, and 24.

### 5.3.2. *Who* and *which* in the BNC Spoken components, by L1 and event type.

The BNC is all one L1, NS English. Calculating a coefficient of non-standard uses to words for its Spoken components, to compare with the ELF data from 5.2.3,<sup>170</sup> does not add to what is already known from section 5.3.1., that non-standard *who* and *which* is very infrequent in the NS English corpus compared with the ELF corpora (section 5.3.1, Figure 15).

The two components of spoken material in the BNC, Demographic and Context-governed, are introduced in section 3.4.2. In the BNC header information for the Demographic files, there is

<sup>170</sup> The coefficient of non-standard uses to words is 3.36. Compare that with the data in Tables 19 and 20. (The BNC Spoken components consist of 10,409,858 words – see section 3.4.2. The number of non-standard uses is 35 – see 5.3.1, Table 24. Dividing 35 by 10,409,858 and multiplying it by 1 million, the coefficient is 3.36.)

only one event type, and that is Conversation.<sup>171</sup> The context-governed component includes all the other event types. Table 25 shows the event types, and the number of standard and non-standard uses of *who* and *which* for each. Out of the 14,790 standard uses, the number of standard uses in the Conversation event type, 1,799, is accurate because the event type (Conversation) and the Spoken component (Demographic) are one and the same. The remainder, 12,991, occur in the Context-governed component. It was not feasible for this study to obtain the event type for them all.<sup>172</sup> A sample<sup>173</sup> of 10% was taken, 1,299 (523 *who* plus 776 *which*, which is 10% of the standard uses of *who* and 10% of the standard uses of *which* in the Context-governed component). An estimated number of standard uses was extrapolated from that sample. For instance, 114 out of the standard uses of *who*, and 191 out of the standard uses of *which*, were found in the Meeting event type, which added together is 305, and becomes an estimate of 3,050 (ten times more) for Meeting.

Table 25. The relative pronouns *who* and *which*, with antecedents that are directly-preceding nouns or directly-preceding clauses that end with nouns, in the BNC Spoken components, by event type.

| Event type               | No. of standard uses of <i>who</i> and <i>which</i> <sup>174</sup> | No. of non-standard uses of <i>who</i> & <i>which</i> | Total uses | % of uses that are non-standard |
|--------------------------|--|---|------------|---------------------------------|
| Conversation             | 1,799  | 10  | 1,809      | 0.55                            |
| Meeting                  | 3,050  | 6   | 3,056      | 0.2                             |
| Interview <sup>175</sup> | 1,280  | 5   | 1,285      | 0.39                            |
| Speech unscripted        | 800  | 4   | 804        | 0.5                             |
| Broadcast discussion     | 2,150  | 4   | 2,154      | 0.19                            |
| Parliament               | 420  | 2   | 422        | 0.47                            |
| Courtroom                | 390  | 1   | 391        | 0.26                            |

<sup>171</sup> An event type is called a 'genre classification' in the BNC header information for a file.

<sup>172</sup> For each hit, it involves looking up the header information for the file it appears in.

<sup>173</sup> When sampling from BNC results, the hits were first randomized, by putting the 'Solutions' (hits) in 'Random order', rather than 'Corpus order', on the 'BNC Query Result' screen.

<sup>174</sup> The total below is 14,789 not 14,790 (the total of standard uses in Table 24) because the 10% sample of 12,991 (the portion of the 14,790 in the Context-governed component) was 1,299, and when that is multiplied by 10 it is 12,990.

<sup>175</sup> This is 's interview' and 's interview: oral history'.

|                                  |        |    |        |      |
|----------------------------------|--------|----|--------|------|
| Broadcast news                   | 710    | 1  | 711    | 0.14 |
| Consultation                     | 50     | 1  | 51     | 1.96 |
| Speech scripted                  | 540    | 1  | 541    | 0.18 |
| Public debate                    | 1,230  | 0  | 1,230  | 0    |
| Lecture <sup>176</sup>           | 870    | 0  | 870    | 0    |
| Unclassified                     | 600    | 0  | 600    | 0    |
| Classroom                        | 350    | 0  | 350    | 0    |
| Tutorial                         | 280    | 0  | 280    | 0    |
| Sermon                           | 130    | 0  | 130    | 0    |
| Broadcast documentary            | 70     | 0  | 70     | 0    |
| Demonstration                    | 40     | 0  | 40     | 0    |
| Sports live                      | 30     | 0  | 30     | 0    |
| Total not including conversation | 12,990 | 25 | 13,015 | 0.19 |
| Total                            | 14,789 | 35 | 14,824 | 0.24 |

Table 25 shows a greater use of the non-standard in less formal speech (Conversation), but this can only be said for the NS corpus. There is no such tendency in the ELF corpora for more non-standard uses of *who* and *which* in less formal event types; in fact, in VOICE the Conversation event type had the lowest percentage (Table 21). In any case, the extent to which non-standard usage appears in Conversation in the BNC is limited. No event type has a percentage very much different from the others. (This contrasts with the other non-standard feature investigated in this thesis, as discussed in section 6.4.1) When the BNC Spoken is divided into its two components, Demographic (Conversation event type) and Context-governed (all other Spoken event types), the comparison with the ELF corpora is not meaningfully altered (Figure 15 versus Figure 16).

---

<sup>176</sup> This is the five genres of ‘s lect’ combined.

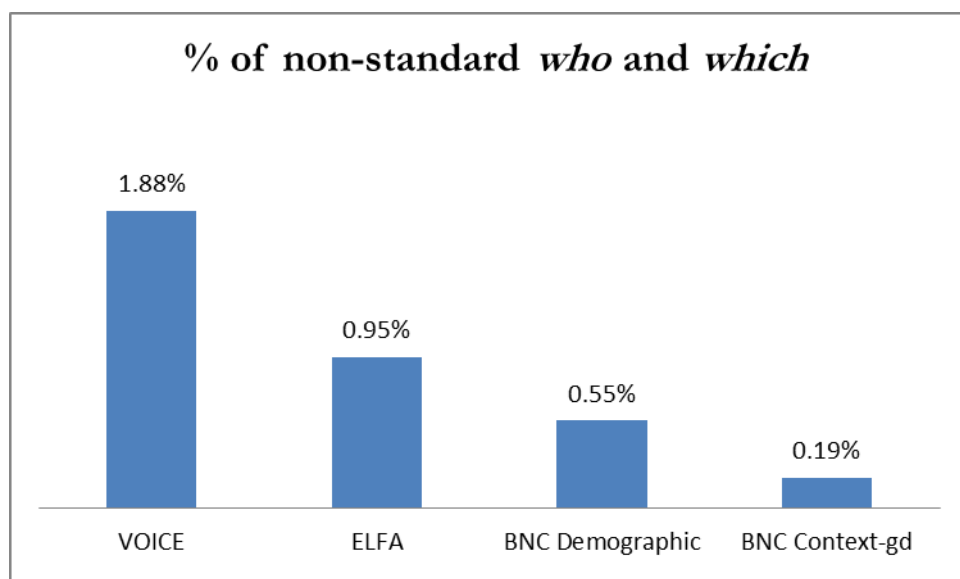


Figure 16. Percentages of usage of the relative pronouns *who* and *which* (with antecedents that are directly-preceding nouns or directly-preceding clauses that end with nouns) that is non-standard, in VOICE , ELFA, and the separate BNC Spoken components. Data from Tables 17, 18, and 25.

### 5.3.3. *Who* and *which* in the BNC Spoken components, by domain.

In the BNC header information for the Demographic files, no domain is given. This component of the BNC consists of everyday conversations, which are considered distinct from all domains that are part of the Context-governed component. In that component, there are four domains: Leisure; Public or Institutional; Educational and Informative; and Business.<sup>177</sup> Table 26 shows the domains, and the number of standard and non-standard uses of *who* and *which* for each.<sup>178</sup> A sample of 10% of the standard uses were examined, 1,299 (523 *who* plus 776 *which*, which is 10% of the standard uses of *who* in the Context-governed component plus 10% of the standard uses of *which* in the Context-governed component), and an estimated number of standard uses per domain was extrapolated from that (the exact same sample used for event type in 5.3.2). For instance, 164 out of the standard uses of *who*, and 118 out of the standard uses of *which*, were found in the Leisure domain, which added together is 282, and becomes an estimate of 2,820 (ten times more) for Leisure. Table 26 reveals that the non-standard usage is spread fairly evenly across the domains, and it is not housed in any one in particular.

<sup>177</sup> The domains are given in Hoffmann et al. (2008: 33, Table 3.4); and online (Burnard (ed.) 2007: section 1.5.2.3, Table 16).

<sup>178</sup> For each hit, it involves looking up the header information for the file it appears in.

Table 26. The relative pronouns *who* & *which*, with antecedents that are directly-preceding nouns or directly-preceding clauses that end with nouns, BNC Spoken Context-governed component by domain.

| Domain                      | No. of standard uses of <i>who</i> and <i>which</i> | No. of non-standard uses of <i>who</i> and <i>which</i> | Total uses | % of uses that are non-standard |
|-----------------------------|---|---|------------|---------------------------------|
| Leisure                     | 2,820   | 10  | 2,830      | 0.35                            |
| Public or Institutional     | 4,670   | 8   | 4,678      | 0.17                            |
| Business                    | 2,300   | 5   | 2,305      | 0.22                            |
| Educational and Informative | 3,200   | 2   | 3,202      | 0.06                            |
| Total                       | 12,990  | 25  | 13,015     | 0.19                            |

Some domains are comparable with domains from the ELF corpora, that is, some of the VOICE domains (Table 23) and the all-educational ELFA (Table 18), but the comparisons show what has already been established: the percentages are lower in the NS corpus. The only interesting difference is that the domain with the highest percentage in the NS corpus, Leisure, entirely lacks non-standard usage of *who* and *which* in Leisure in the ELF corpus VOICE.

#### 5.4. The learner language corpus, LINDSEI.

##### 5.4.1. *Who* and *which* in LINDSEI.

As explained in section 3.7, LINDSEI was tagged by me using CLAWS7. This meant that I could use the same search strings that I used for ELFA: ‘NN\* who’ and ‘NN\* which’. There were 790 hits for *who*, and 420 for *which*. As described in section 3.5.2, LINDSEI includes both interviewer speech (‘A turns’) and interviewee speech (‘B turns’). Only the speakers in the B turns are learners, so only B turns count as learner language. All speech from A turns had to be removed from the hits that were obtained, whether they were standard usage or not. There is an instance where the interviewer, not the interviewee, uses the non-standard *which*:

76      the[i:] the *teacher which* you mentioned is it Mr <name of person> [LINDSEI CH036, complete sentence.]<sup>179</sup>

<sup>179</sup> Transcription of the kind [i:] indicates pronunciation (see LINDSEI handbook 2010: 16).

I read through all 1,210 hits to exclude A turns such as this, as well as excluding data for the usual reasons (see 5.1.2). Out of 790 hits for *who*, 126 hits were excluded. From the remaining 664, there are 659 standard uses of *who*, and 5 non-standard uses of *who*. One example of non-standard *who* is:

- 77      well except for the *weather who* was not very good when I was there [LINDSEI, file SP028, excerpt from sentence.]

In order to count the standard and non-standard uses of *who* and *which*, each included hit has to be considered to be either one or the other. This being necessary, some controversial decisions may result. For instance, I accept the following example from the BNC to be standard, because of the animacy granted to some animals (see section 2.17.2):

- 78      There were *animals who* lived in the forest who went out hunting only at night. [BNC Spoken Context-governed component, file F72, line 136, complete.]

Yet in LINDSEI, I find the following example to be non-standard:

- 79      they . are *animals who* are . walking (eh) in in . in the houses [LINDSEI, file FR026, excerpt from sentence.]<sup>180</sup>

This is because I find the former animals, from a storytelling workshop,<sup>181</sup> to be closer to the ‘pet animal associated with personality’ (Hasselgård, Lysvåg, and Johansson 2012: 321) than the latter animals, referred to by a French student talking in a rather distant way about a tribal area in northern Thailand. There is no association of the animals with personality in example 79.

Out of 420 hits for *which*, 78 hits were excluded. From the remaining 342, there are 306 standard uses of *which*, and 36 non-standard uses of *which*. Here is one example:

- 80      so it's about a *girl which* is (er) .. which has something special in her face and . a painter has to: to paint a po= her portrait [LINDSEI, file FR010, excerpt from sentence.]<sup>182</sup>

Table 27 shows the number and percentage of standard and non-standard uses in LINDSEI.

---

<sup>180</sup> Parentheses represent ‘filled pauses and backchannelling’; and a dot with a space on either side represents a pause of less than one second (LINDSEI handbook 2010: 14). The speaker may have meant *there* instead of *they*.

<sup>181</sup> As stated in the BNC header information for file F72.

<sup>182</sup> The speaker is talking about the cartoon used in the picture description task (see section 3.5.1). Two dots with a space on either side represents a pause of between one and three seconds (LINDSEI handbook 2010: 14). The equals sign represents a truncated word (LINDSEI handbook 2010: 15).

Table 27. The relative pronouns *who* and *which*, with antecedents that are directly-preceding nouns or directly-preceding clauses that end with nouns, in LINDSEI (B turns).

| Relative pronouns | No. of standard uses | No. of non-standard uses | Sum          |
|-------------------|----------------------|--------------------------|--------------|
| <i>Who</i>        | 659 (99.25%)         | 5 (0.75%)                | 664 (100%)   |
| <i>Which</i>      | 306 (89.47%)         | 36 (10.53%)              | 342 (100%)   |
| Total             | 965 (95.92%)         | 41 (4.08%)               | 1,006 (100%) |

The percentage of the total number of non-standard uses is the highest percentage from any of the corpora investigated (Figure 17). It is primarily the non-standard use of *which*. The speakers may be using *which* as a default relative pronoun, i.e. unless they become aware of a reason to choose differently, in which case *who* is the ‘marked’ relative pronoun, chosen with certainty, and hence receives less non-standard use. This does not seem to be the case with the ELF corpora, especially not ELFA.

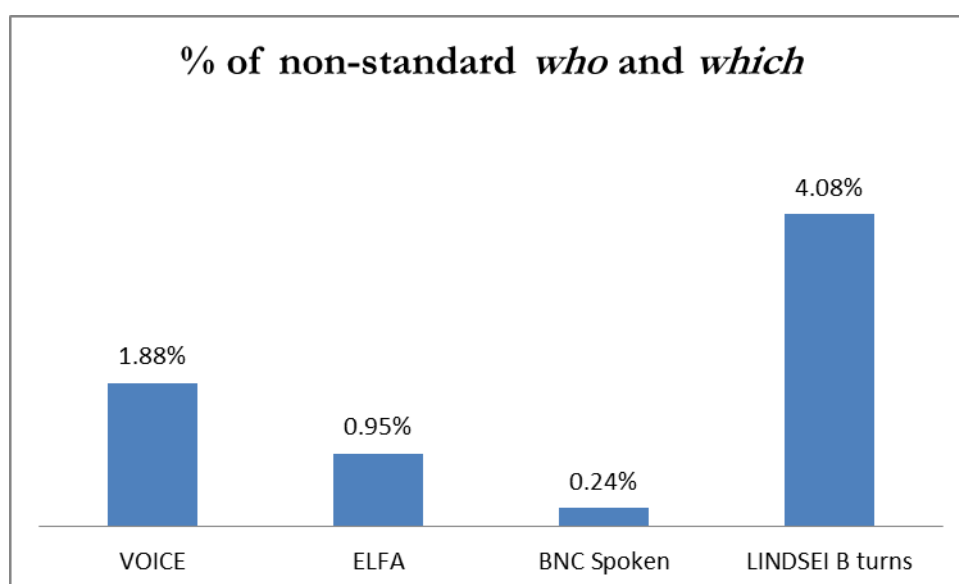


Figure 17. Percentages of usage of the relative pronouns *who* and *which* (with antecedents that are directly-preceding nouns or directly-preceding clauses that end with nouns) that is non-standard, in VOICE, ELFA, the BNC Spoken components, and LINDSEI (B turns). Data from Tables 17, 18, 24, and 27.

It was expected that learners would produce more non-standard uses than NSs (see section 2.15), but not necessarily more than users of ELF. It is of interest to this thesis if there is a difference in

non-standard usage between higher intermediate to advanced learners and people speaking in ELF situations (see section 2.11), but the difference here is only by a couple of percentage points.

#### 5.4.2. *Who* and *which* in LINDSEI, by L1, event type, and domain.

While it would not be difficult to calculate the percentages of standard and non-standard usage of the relative pronouns *who* and *which* for speakers of each L1 in LINDSEI, this was not feasible for VOICE and ELFA (see section 5.2.3, note 139), so for comparison, only a coefficient of non-standard uses to the number of words per L1 in LINDSEI is calculated, as shown in Table 28. For more about how Table 28 was constructed, see section 3.5.3 on how LINDSEI is divided by L1.

Table 28. Usage of the relative pronouns *who* and *which* (with antecedents that are directly-preceding nouns or directly-preceding clauses that end with nouns) that is non-standard, in LINDSEI (B turns), by L1.

| A                           | B                                 | C  | D   |
|-----------------------------|-----------------------------------|--|---|
| L1 group                    | No. of words in LINDSEI (B turns) | No. of non-standard uses of <i>who</i> and <i>which</i> in LINDSEI (B turns) | Coefficient of no. of non-standard uses to no. of words (C / B × 1 million) |
| Romance <sup>183</sup>      | 214,819                           | 25   | 116.38  |
| Balto-Slavic <sup>184</sup> | 162,290                           | 10   | 61.62   |
| Germanic <sup>185</sup>     | 237,406                           | 5  | 21.06   |
| Greek                       | 75,998                            | 1  | 13.16   |
| Chinese                     | 63,542                            | 0  | 0   |
| Japanese                    | 37,126                            | 0  | 0   |
| Arabic                      | 960                               | 0  | 0   |
| Total                       | 792,141                           | 41   | 51.76   |

There seem to be clear divisions by the speakers' L1s in the non-standard use of this feature. There are no non-standard uses by Chinese and Japanese L1s, for instance, in contrast to the

<sup>183</sup> French 91,402 + Italian 59,573 + Spanish 63,844 = 214,819.

<sup>184</sup> Bulgarian 69,169 + Polish 93,121 = 162,290.

<sup>185</sup> Dutch 79,652 + German 85,950 + Swedish 71,804 = 237,406.



groups of Indo-European L1s. (The Chinese and Japanese languages are discussed in section 6.3.) As with ELFA, the Romance L1 group has more non-standard uses of *who* and *which* than the Balto-Slavic group, which in turn has more than the Germanic group. The Germanic group is ranked lowest of the three in VOICE also, and when VOICE, ELFA, and LINDSEI are put together (Figure 18), the three Germanic coefficients come last. With such consistency, it is hard not to interpret this as L1 influence, particularly as the group with the lowest coefficient of the three groups is the Germanic group, the closest languages to English. (To put the NS of English into this frame, the coefficient for the Spoken components of the BNC was 3.36 (see section 5.3.2, note 170).)

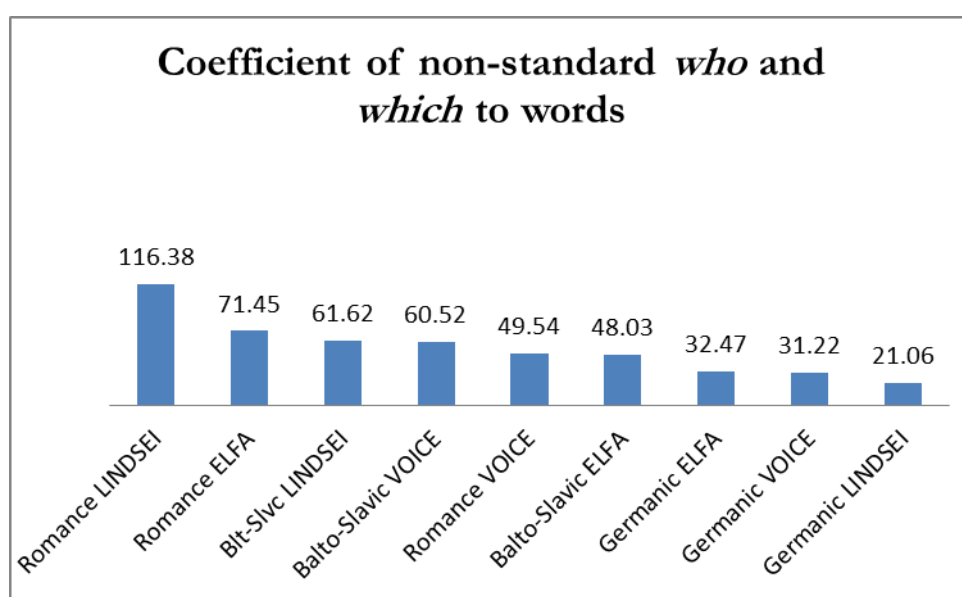


Figure 18. Ranking of coefficients of non-standard uses of the relative pronouns *who* and *which*, with antecedents that are directly-preceding nouns or directly-preceding clauses that end with nouns, to words per L1 group (with at least four non-standard uses per L1 group), in VOICE, ELFA, and LINDSEI (B turns). Data from Tables 19, 20, and 28.

All of LINDSEI is one event type, ‘informal interview’ (LINDSEI handbook 2010: 3), however, a comparison of it with the Interview event types of VOICE and the BNC Spoken Context-governed components does not alter what has already been gleaned from the comparison between the corpora already (section 5.4.1, Figure 17). LINDSEI is all in the educational domain. A comparison between it and the Educational domains of other corpora (VOICE; ELFA; the BNC Spoken Context-governed component) did not produce anything worth reporting on. Section 6.4 deals generally with the event type and domain of LINDSEI.

### 5.5. *Who* and *which* with collective antecedents.

This section examines the relative pronouns *who* and *which* with ‘collective antecedents’ (Cogo and Dewey 2012: 74), to discover whether in the ELF corpora there is a greater preference for *which* than in other corpora, as discussed in section 2.17.5. Cogo and Dewey write that in cases where ‘*who* and *which* are both permitted. ... in ELF it seems the emergent trend is towards a preference for the *which* pronoun’ (Cogo and Dewey 2012: 74). From their examples (section 2.17.5, examples 34-36), it seems that by ‘collective antecedents’ they mean antecedents that are collective nouns or demonstrative pronouns. The data in this chapter has been restricted to antecedents that are nouns (and clauses that end in nouns), so demonstrative pronoun antecedents will not be examined. Regarding collective nouns with the relative pronouns *who* and *which*, the ‘permitted’ choice is between distributive and unit readings (see section 2.17.3). This example from LINDSEI illustrates the choice:

- 81      his father was (er) the devil himself and the devil was the: (em) <clicks tongue> (er) the: master of the *firm which* (er) who had (er) (er) employed him [LINDSEI, file BG040, complete sentence.]<sup>186</sup>

The word *firm* is a collective noun. It can be seen that the speaker corrected *which* to *who*,<sup>187</sup> revealing the option that the speaker had of a unit reading of *firm (which)* or a distributive reading (*who*).

However, it is not entirely clear from Cogo and Dewey’s text that the choice between readings is all that is meant, when they write that ‘*who* and *which* are both permitted’ with ‘nouns with a collective human referent’ (Cogo and Dewey 2012: 74). I decided to refine what is meant by ‘collective antecedent’ in two ways. Firstly, as the focus is on the choice of relative pronoun only, and there is no concern with or focus on the verb, plurals are relevant, so I extended the concept of a collective noun to include plural nouns. Thus, not only *firm* (example 81) but *firms* (example 82) are antecedents under consideration.

- 82      who have like erm er young people employed or like who have er apprenticeship places for young people erm they get mummy er money from those *firms who* refused to er employ erm [VOICE, file POwsd257, line 621, complete.]

Secondly, to ensure that there was a genuine choice in each case, I excluded instances where a distributive reading seemed impossible, as with *country* in this example:

---

<sup>186</sup> A colon indicates that the last syllable is lengthened (LINDSEI handbook 2010: 16).

<sup>187</sup> How I consider speech that the speaker subsequently corrects is explained in section 3.8.

- 83 I'm supposed to talk about the *country which* I (eh) have visited [LINDSEI, file PL024, excerpt from sentence.]

This contrasts with the use of *country* where a distributive reading is at least possible:

- 84 as a *country who* has got a quite big public finance sector [ELFA, file ULECD120, excerpt from sentence.]

Although the example is not quite expressed as a distributive reading (that would be *a country who have*), the fact that as far as the relative pronoun (if not the verb) is concerned, the antecedent is animate, implies a focus on the people making up the country. So, under my conception of 'collective antecedent', example 84 was included.

The standard uses of *who* and *which* were examined in VOICE (see Table 17), ELFA (Table 18), the BNC Spoken Demographic component (Table 24), and LINDSEI B turns (see Table 27). An examination of the BNC Spoken Context-governed component was not feasible for this study, as there were too many standard uses to sift through for this purpose. The BNC Spoken Demographic component suffices to represent NS English here.<sup>188</sup> The standard uses in each corpus were examined to see how many collective antecedents are with *who* and how many are with *which*, and for each corpus this is expressed as a percentage (Figure 19). For example, 51 of the standard uses of *who* in VOICE have a collective antecedent, and 103 of the standard uses of *which* have a collective antecedent. The total is 154, and *who* is chosen in 33.12% of instances, and *which* in 66.88%. These percentages were then rounded to 33%/67%.

---

<sup>188</sup> The number of standard uses of *who* and *which* in the Demographic component is presented in Table 25 (under the Conversation event type).

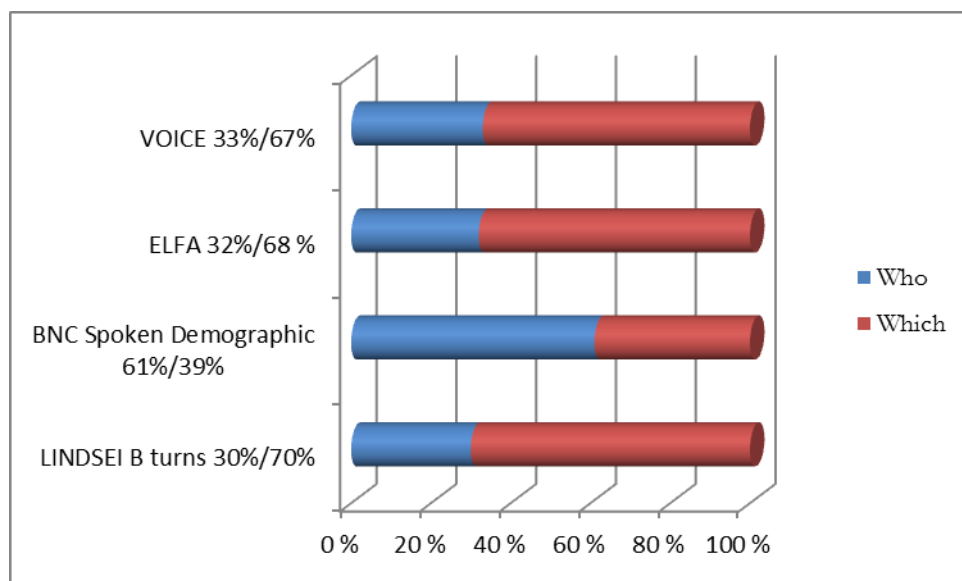


Figure 19. Percentages of (standard) usage of the relative pronouns *who* versus *which*, with ‘collective antecedents’ (see section 5.5) that are directly-preceding nouns or directly-preceding clauses that end with nouns, in VOICE, ELFA, the BNC Spoken Demographic component, and LINDSEI (B turns). Data not presented elsewhere.

Figure 19 might not show a ‘straight choice’ between *who* and *which*, because there were not equal numbers of the same collective antecedents. Therefore I examined the one collective antecedent that appears with both *who* and *which* in all corpora, *company/ies* (Figure 20). To use VOICE again as an example, there were 4 hits for *company who*, 2 hits for *companies who*, 3 hits for *company which*, and 4 hits for *companies which*. This means 6 hits for *who* and 7 for *which*, which is 46.15% and 53.85% respectively, or 46%/54%.<sup>189</sup>

<sup>189</sup> In Figure 20, the 50/50 split in LINDSEI is between two lone hits, so there has been no rounding up or down.

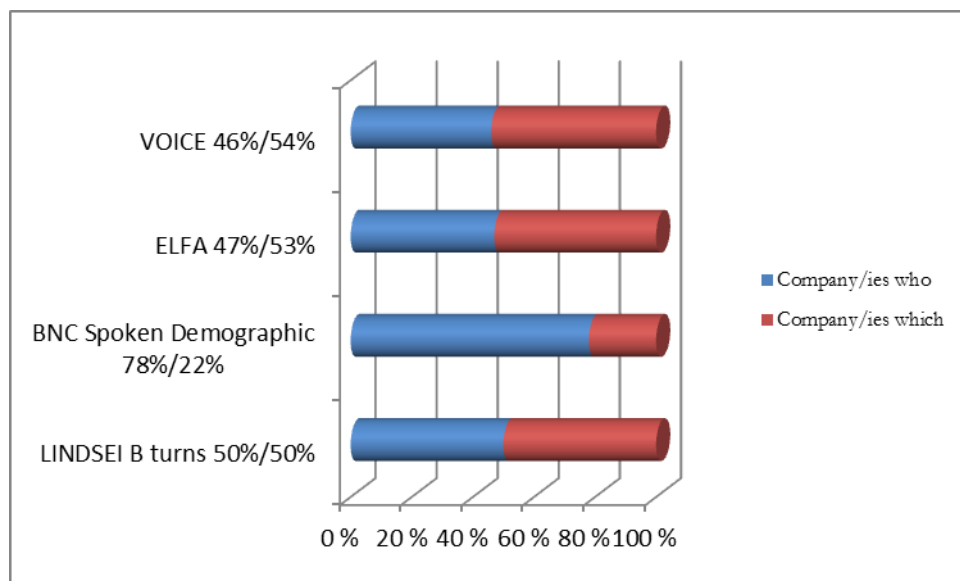


Figure 20. Percentages of (standard) usage of the relative pronouns *who* versus *which*, with *company/ies*, in VOICE, ELFA, the BNC Spoken Demographic component, and LINDSEI (B turns). Data not presented elsewhere.

Both Figures 19 and 20 show a preference for *who* among the NSs, while the ELF corpora back up Cogo and Dewey's observation of a preference for *which*. However, the choice is about half and half in Figure 20, which warns against making any conclusions about an 'emergent trend'. In both Figures 19 and 20, LINDSEI mirrors the ELF corpora, which shows a similarity between the use of ELF and learner language in this regard.

## **Chapter 6. Summary and conclusion.**

### **6.1. Introduction.**

English as a Lingua Franca (ELF) is *the use of English among communicators of different first languages (including English itself), for whom English is the communicative medium of choice, and often the only option.* This definition is based on that of Seidlhofer (2011: 7), with some amendments. One can easily picture English being used in this way in, for example, international organizations and international tourism.

There are non-standard features<sup>190</sup> of English that are viewed as errors<sup>191</sup> from an English as a Foreign Language (EFL) point of view, but could be viewed neutrally from an ELF perspective, if they do not interfere with communicative effectiveness, or if they are a manifestation of the group identity of the speaker. That does not mean, however, that *more* of these non-standard features will necessarily be found in ELF.

This thesis follows up claims that there are non-standard features of English shared by ELF events,<sup>192</sup> and at frequencies that would make ELF distinct from native speaker (NS) English and English used by advanced learners of EFL. While users of ELF, for example the Association of Southeast Asian Nations, which has English as its working language, may be *sociologically* distinct from NSs and learners, it is the language itself in ELF events that is under investigation.

Specifically, previous published studies by Breiteneder (2005 and 2009) and Cogo and Dewey (2006 and 2012) fuel claims that certain non-standard features are widespread in ELF, and this thesis examines two such features, both of which were named by Seidlhofer as “errors” that... [are] no obstacle to communicative success’ (Seidlhofer 2004: 220): the 3<sup>RD</sup> PERSON ZERO, which is the absence of the third person singular present tense -s ending; and the interchange of the relative pronouns *who* and *which*. These examples show the non-standard features in an ELF corpus.<sup>193</sup>

---

<sup>190</sup> A FEATURE is a term used ‘to refer to any typical or noticeable property of spoken or written language’ (Crystal (ed.) 2003: 177).

<sup>191</sup> ERROR defined as ‘based on the language user’s ability to conform to a set of real or imagined standards of expression’ (Crystal (ed.) 2003: 165).

<sup>192</sup> An event can be a conversation, discussion, lecture, meeting, etc.

<sup>193</sup> A CORPUS (plural CORPORA) is a ‘collection of linguistic data, either written texts or a transcription of recorded speech, which can be used as a starting-point of linguistic description or a means of verifying hypotheses about a language (corpus linguistics)’ (Crystal (ed.) 2003: 112).

- 85      okay let's say that *it* already *exist* or [VOICE, file POWgd, line 100, complete.]<sup>194</sup>
- 86      er are there any *machines who* make photos [VOICE, file EDsve423, line 458, complete.]
- 87      *rock stars* in your country *which* are very famous [VOICE, file PBmtg463, excerpt from line 1647.]

The largest possible dataset of ELF was examined: two spoken ELF corpora of over a million words each, the Vienna-Oxford International Corpus of English (VOICE) version 2.0 (2013), which is 1,320,311 words,<sup>195</sup> and the English as a Lingua Franca in Academic settings (ELFA) corpus (2008), which is 1,037,197 words.<sup>196</sup> This dataset is many times larger than those used in previous studies. ELFA was tagged by me using the CLAWS7 tagger for this purpose. The non-standard features were also investigated in an NS corpus, the Spoken components of the British National Corpus (BNC) version 4.0 (2007), and in a spoken corpus of higher intermediate to advanced learners of EFL, the Louvain International Database of Spoken English Interlanguage (LINDSEI) (2010). To investigate LINDSEI, I tagged it myself using CLAWS7, and because LINDSEI consists of interviews, I removed all the interviewer speech ('A turns') from analysis, so that the data consisted only of the learner speech ('B turns').

The investigation is described in chapters 4 and 5, and it is now possible to attempt to answer the research questions which were posed in chapter 1. The three research questions are answered in sections 6.2, 6.3, and 6.4. Then the study is briefly compared with previous research (6.5), and implications of this thesis are addressed (6.6).

## 6.2. The first research question.

The first research question is: *Two non-standard features of English (the absence of the third person singular present tense -s ending, and the interchange of the relative pronouns who and which) are under investigation. Are the two non-standard features common to VOICE and ELFA? Are they found in a spoken native speaker corpus? Are they found in a spoken advanced learner corpus? What are the comparative frequencies of these non-standard features, between corpora?*

First the 3<sup>rd</sup> person zero and *who* and *which* investigations are briefly summarized below, then the research question is answered.

### 6.2.1. A summary of the investigation of the 3<sup>rd</sup> person zero.

---

<sup>194</sup> The indented examples are numbered, and the first number in this chapter is 83. The italics are added.

<sup>195</sup> The WordSmith word count. See section 3.2.1.

<sup>196</sup> The WordSmith word count. See section 3.3.1.

Once hits for 3<sup>rd</sup> person zeroes were found in the corpora, they were examined to remove hits which were standard constructions that take the base form of the verb, for example the ‘coordinated noun phrase as subject’ (Hasselgård, Lysvåg, and Johansson 2012: 267):

88      only one quarter of the people who take *it get* side effects. [BNC Spoken Context-governed, file HV1, excerpt from line 10.]

In VOICE, 4.92% of the third person singular present tense forms<sup>197</sup> (of lexical verbs<sup>198</sup> and DO) are 3<sup>rd</sup> person zeroes. VOICE, however, is unique, in that all the 3<sup>rd</sup> person zeroes within it can be detected because of the tagging. In other corpora examined, this cannot be done. Instead, 3<sup>rd</sup> person zeroes were obtained by searching for the pronouns *he*, *she*, and *it*, directly followed by the base form of a verb. For comparison, the VOICE data was also restricted to the construction *he/she/it* + verb, and 3.88% of these present tense forms (of lexical verbs and DO) are zeroes.

In ELFA, 2.28% of the third person singular present tense forms (of lexical verbs and DO), in the construction *he/she/it* + verb, are 3<sup>rd</sup> person zeroes.

In the spoken components of the BNC, 5.01% of the third person singular present tense forms<sup>199</sup> (of lexical verbs and DO), in the construction *he/she/it* + verb, are 3<sup>rd</sup> person zeroes. NS English is expected to have a lower percentage of non-standard forms (NS English *is* the ‘standard’),<sup>200</sup> but the reason for such a comparatively high percentage is two particular event types in the spoken components of the BNC: Conversation and Interview. Conversation has 7.83% 3<sup>rd</sup> person zeroes and Interview has 9.96%. When these two event types are excluded, the spoken components of the BNC have 0.69% 3<sup>rd</sup> person zeroes, a lower percentage than the ELF corpora.

In LINDSEI (B turns), 14.42% of the third person singular present tense forms (of lexical verbs and DO), in the construction *he/she/it* + verb, are 3<sup>rd</sup> person zeroes. This is the highest percentage of any of the corpora investigated, but the reason for this is two particular sets of speakers in the corpus, who have Chinese or Japanese as their first language (L1). The Chinese L1 group has 62.87% 3<sup>rd</sup> person zeroes and the Japanese L1 group has 60.33%. Neither of these L1s is well represented in VOICE or ELFA,<sup>201</sup> so LINDSEI cannot be directly compared with them. When these two L1 groups are excluded, LINDSEI has 6.17% 3<sup>rd</sup> person zeroes, a percentage only

---

<sup>197</sup> Only 10% of the *-s* endings could be checked for correct tagging.

<sup>198</sup> LEXICAL VERB: ‘[a]ny verb which is not an auxiliary... *run, smile, die, elope...*’ (Trask 2000: 77).

<sup>199</sup> Only 10% of the *-s* endings could be checked for correct tagging.

<sup>200</sup> The concept of standard/non-standard is discussed in sections 2.11 and 2.13.

<sup>201</sup> See section 4.4.2, note 130 (compared with Table 15).



slightly higher than those of the ELF corpora. Figure 21 aims to give a full picture of the 3<sup>rd</sup> person zero investigation.

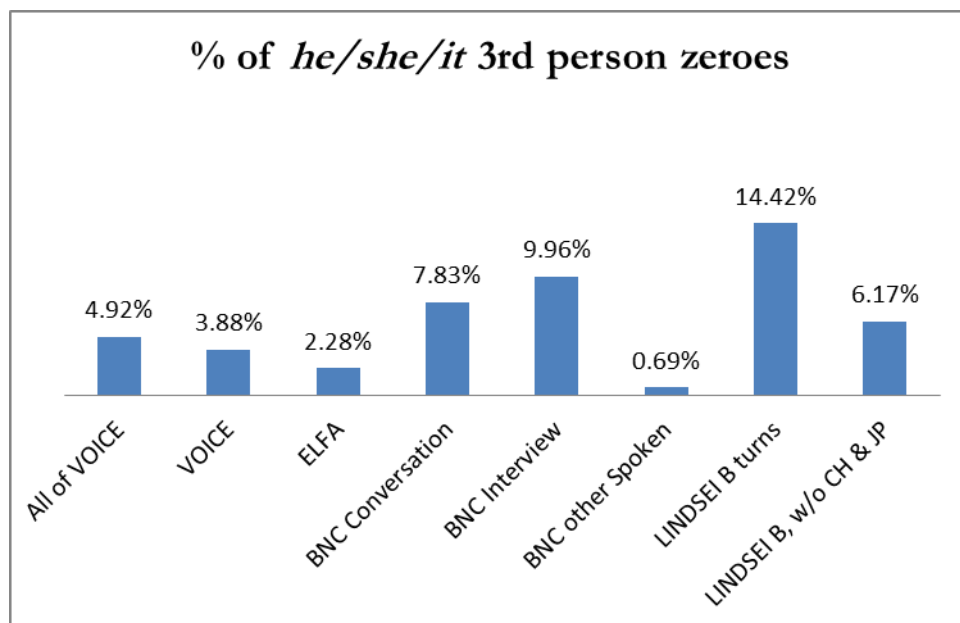


Figure 21. Percentages of third person singular present tense forms (of lexical verbs & DO) that are zeroes, in VOICE, ELFA, BNC (Spoken) & LINDSEI (B turns). Constructions *he/she/it* + zero except ‘All of VOICE’ (all 3<sup>rd</sup> person zeroes of lexical verbs & DO in VOICE). BNC (Spoken) divided in 3 by event type. LINDSEI (B turns) both with & without Chinese & Japanese L1s. Data: sections 4.2.1 & 4.2.2, & Tables 11 & 16.

## 6.2.2. A summary of the investigation of the relative pronouns *who* and *which*.

For the relative pronouns *who* and *which*, the corpus investigation was restricted to *who* with antecedents<sup>202</sup> that are directly-preceding nouns, and *which* with antecedents that are directly-preceding nouns or directly-preceding clauses that end with nouns. (*Who* cannot have a clause as an antecedent.) To avoid excessive repetition, this should be taken as read for the rest of this chapter.

The hits were examined to remove any which were instances of *who* and *which* as interrogative pronouns, and so on.

<sup>202</sup> ANTECEDENT: ‘The antecedent of a relative pronoun or a relative clause is the noun phrase that the pronoun or the clause refers back to’ (Hasselgård 2012).

In VOICE, 1.45% of the uses of *who* are non-standard, and 2.16% of the uses of *which* are non-standard. The total percentage of non-standard uses is 1.88%.

In ELFA, 1.09% of the uses of *who* are non-standard, and 0.91% of the uses of *which* are non-standard. The total percentage of non-standard uses is 0.95%.

In the BNC Spoken components, 0.16% of the uses of *who* are non-standard, and 0.29% of the uses of *which* are non-standard. The total percentage of non-standard uses is 0.24%. NS English is expected to have a lower percentage of non-standard usage.

In LINDSEI (B turns), 0.75% of the uses of *who* are non-standard, and 10.53% of the uses of *which* are non-standard. The total percentage of non-standard uses is 4.08%. This is the highest percentage of the corpora investigated. It is noteworthy that the non-standard usage is primarily the non-standard usage of *which*. The speakers may be using *which* as a default relative pronoun, i.e. unless they become aware of a reason to choose differently, in which case *who* is the ‘marked’ relative pronoun, chosen with certainty, and hence receives less non-standard use. This does not seem to be the case with the ELF corpora, especially not ELFA.

Figure 22 provides a picture of the *who* and *which* investigation.

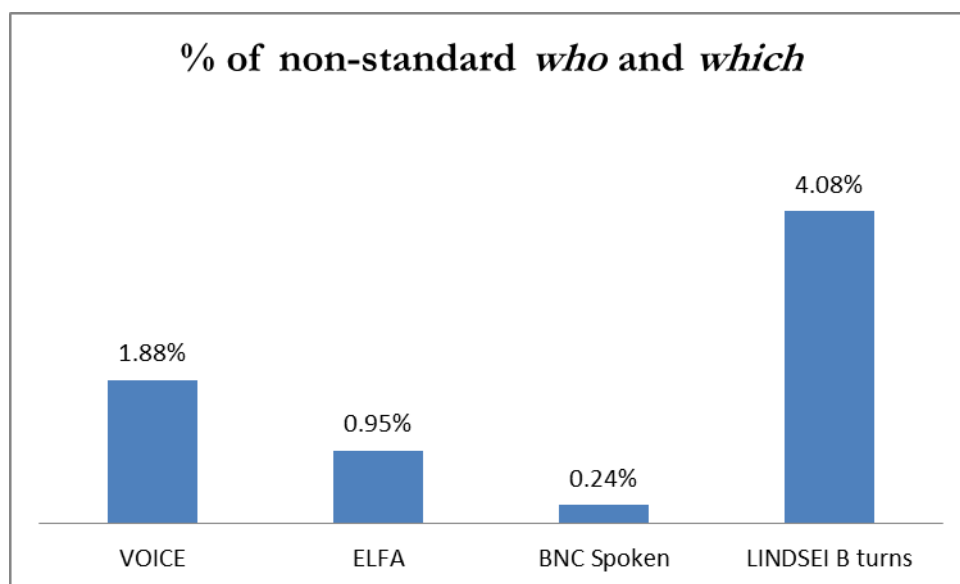


Figure 22 (same as Figure 17 in chapter 5). Percentages of usage of the relative pronouns *who* and *which* (with antecedents that are directly-preceding nouns or directly-preceding clauses that end with nouns) that is non-standard, in VOICE, ELFA, the BNC Spoken components, and LINDSEI (B turns). Data from Tables 17, 18, 24, and 27.

### 6.2.3. Answer to the first research question.

*Two non-standard features of English (the absence of the third person singular present tense -s ending, and the interchange of the relative pronouns who and which) are under investigation. Are the two non-standard features common to VOICE and ELFA?*

Both VOICE and ELFA contain the two non-standard features under investigation, albeit in low percentages. A comparison between the four corpora suggests that VOICE and ELFA have more non-standard features than the NS corpus, and fewer than the learner corpus. The two ELF corpora are near each other in terms of percentages of these two non-standard features. This suggests that the ELF corpora have something in common.

*Are they found in a spoken native speaker corpus?*

The two non-standard features are found in the spoken NS corpus, which is the BNC (Spoken components). In two event types, the 3<sup>rd</sup> person zero is found in relatively high percentages, although both under 10%. Otherwise, the non-standard features are low in frequency in this corpus.

*Are they found in a spoken advanced learner corpus?*

The corpus used, LINDSEI (B turns), is a spoken corpus, but consists of a mix of higher intermediate and advanced learners (LINDSEI handbook 2010: 10). The two non-standard features are found in it. The percentages for the non-standard features are highest in this corpus of the four, although still low. The percentage for the 3<sup>rd</sup> person zero can be mitigated by the removal of two particular groups of speakers, Chinese and Japanese L1s; without these speakers the percentage is just a little higher than that of VOICE.

*What are the comparative frequencies of these non-standard features, between corpora?*

The comparative frequencies, expressed as percentages of third person singular present tense forms (of lexical verbs and DO) that are 3<sup>rd</sup> person zeroes, and percentages of usage of the relative pronouns *who* and *which* that is non-standard, are given in Figures 21 and 22. Although the dataset for this study is large, few non-standard features were found. The baseline for the percentages is thus too low to make a conclusion that there are meaningful differences between the corpora in the occurrence of these non-standard features. That in itself is a noteworthy finding, however, as neither of the non-standard features can be claimed as an ‘emergent trend’ or a ‘default option’ for ELF.

### 6.3. The second research question.

The second research question is: *Are the frequencies of any non-standard features found influenced by the L1s of the speakers?*

The non-standard features were recorded in the speech of many different L1s across the ELF corpora (VOICE and ELFA). For each feature, these were sorted into L1 groups for analysis, e.g. Romance language L1s, Germanic language L1s (that is, Germanic excluding English), and so on.<sup>203</sup> It was not feasible for this study to calculate the number of *standard* features (i.e. third person singular present tense *-s* endings, and standard uses of *who* and *which* as relative pronouns) for each L1 group, so coefficients were calculated of the number of non-standard features in an L1 group to the number of words that L1 group has in a corpus.

Many L1s were represented by very few non-standard features, so analysis of coefficients was restricted to those with at least six 3<sup>rd</sup> person zeroes, and at least four non-standard uses of *who* or *which*. The results suggest L1 difference, and in the expected direction, meaning for example the Semitic L1 group, with languages very different to English, has a high coefficient of 3<sup>rd</sup> person zeroes, while the Germanic L1 group, with languages similar to English, has a low coefficient. In both ELF corpora for both non-standard features, Romance and Balto-Slavic have consistently higher coefficients than Germanic.

A coefficient was calculated for the BNC Spoken components. For the 3<sup>rd</sup> person zero, this figure is relatively high, but it is distorted by the great difference between event types within the BNC. The coefficient for the non-standard uses of *who* and *which* is much lower than that found in the ELF corpora.

LINDSEI seems to show L1 influence in the 3<sup>rd</sup> person zero among Chinese and Japanese L1s (L1s not well represented in the ELF corpora). Both L1 groups in LINDSEI use the 3<sup>rd</sup> person zero more often than the *-s* ending. There is a noticeable difference with *who* and *which* as well: Chinese and Japanese L1s in LINDSEI do not have any non-standard usage of these relative pronouns.

It seems likely that these results are connected with the fact that Chinese (Mandarin) does not have verb inflections, which could lead speakers to forget to add the *-s* ending in English. Japanese has verb inflections, but only in tense, not in person or number, etc., so verbs have the same form regardless of the subject, which could lead speakers to forget the English *-s*. However,

---

<sup>203</sup> Full details of how groups were formed for each feature and each corpus are in sections 4.2.4 and 5.2.3.

Chinese speakers' L1 cannot help them distinguish between *who* and *which*, as these do not exist in Chinese. Japanese does not have relative pronouns either, so there is nothing about Japanese that would help the learners avoid non-standard usage.<sup>204</sup> The standard usage of *who* and *which* in LINDSEI can be seen as consistent by L1, but cannot be explained as L1 *influence*.

LINDSEI conforms to the pattern seen in the ELF corpora of Romance having a higher coefficient than Germanic, in both non-standard features. The data suggests that L1 makes a difference. This seems to be in an expected direction – the less a language is like English, the more non-standard features. Yet the Uralic group has L1s very different to English (e.g. Finnish), and it has a low coefficient for 3<sup>rd</sup> person zeroes in ELFA. This could be the influence of a feature in Uralic languages, or it may just have to do with widespread English use in Europe (where Uralic languages can be found). Harder to explain is the Balto-Slavic group having a low coefficient for 3<sup>rd</sup> person zeroes in LINDSEI, lower than the Germanic group. This is an exception to the general pattern. Ultimately, the amount of data for each L1 is not millions of words, so no strong conclusions can be made. There is definitely the suggestion of L1 influence, however.

#### 6.4. The third research question.

The third research question is: *Does the context of the interactions (event types or domains) influence the frequencies of any non-standard features found?* This can be answered in two parts: first the event types, then the domains. (There was no other context examined.)

##### 6.4.1. Event types.

An EVENT TYPE is the general function or form of an event, whether a discussion, meeting, or conversation, etc., analogous to 'genre' in text. Data was collected on how the non-standard features appear in the ELF corpora by event type, with the idea of looking for any patterns, or seeing if they are prominent in any event type.

The percentage of forms (of lexical verbs and DO) that are 3<sup>rd</sup> person zeroes in VOICE was discovered to be no greater than 5.47% in any event type, and no less than 4.17% (setting aside the event type 'Service encounter', for which there is only one 3<sup>rd</sup> person zero). This does not show prominence in any event type. When the data is restricted to *he/she/it* + verb, the percentages are lower and the gap is wider: 2.96%-5.19% (setting aside Service encounter, for

---

<sup>204</sup> Chinese and Japanese teachers were consulted for this paragraph.

which there are no 3<sup>rd</sup> person zeroes). In ELFA, 3<sup>rd</sup> person zeroes in *he/she/it* + verb constructions are not prominent in any event type. The percentages of forms (of lexical verbs and DO) that are 3<sup>rd</sup> person zeroes range from 2.07% to 2.65%. The sets of percentages for ELFA and the restricted VOICE are shown, ranked, in Figure 23.

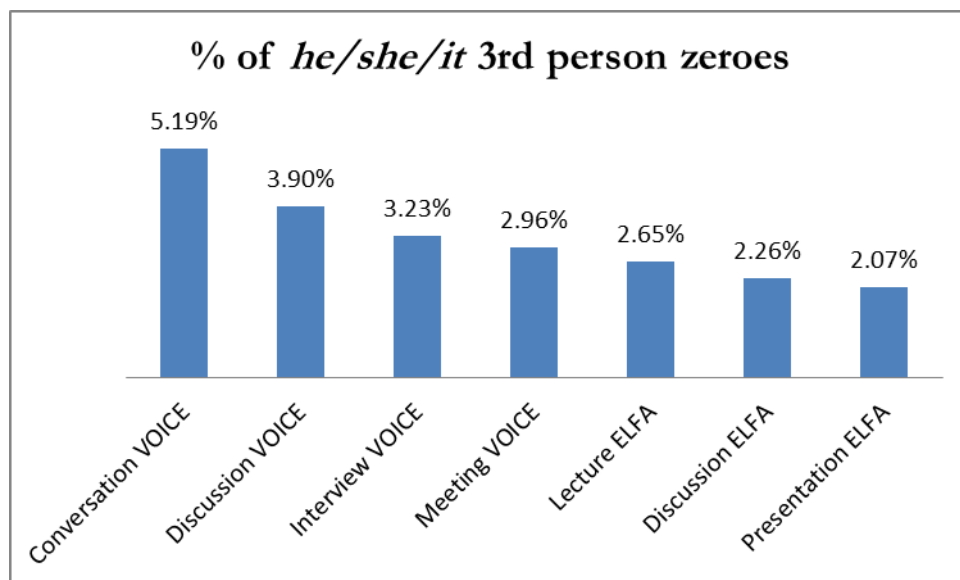


Figure 23. Ranking of percentages of third person singular present tense forms (of lexical verbs and DO) of the construction *he/she/it* + verb that are 3<sup>rd</sup> person zeroes, in event types of ELF corpora (VOICE and ELFA). Data from Tables 6 and 7.

The percentage of usage of the relative pronouns *who* and *which* that is non-standard in VOICE was discovered to be no greater than 2.83% and no less than 1.4% for any event type (discounting the dramatic percentages for those event types for which there is only one non-standard use). The percentages of usage of the relative pronouns *who* and *which* that is non-standard in ELFA range from 0.41% to 1.32%. Both sets of percentages are shown, ranked, in Figure 24.

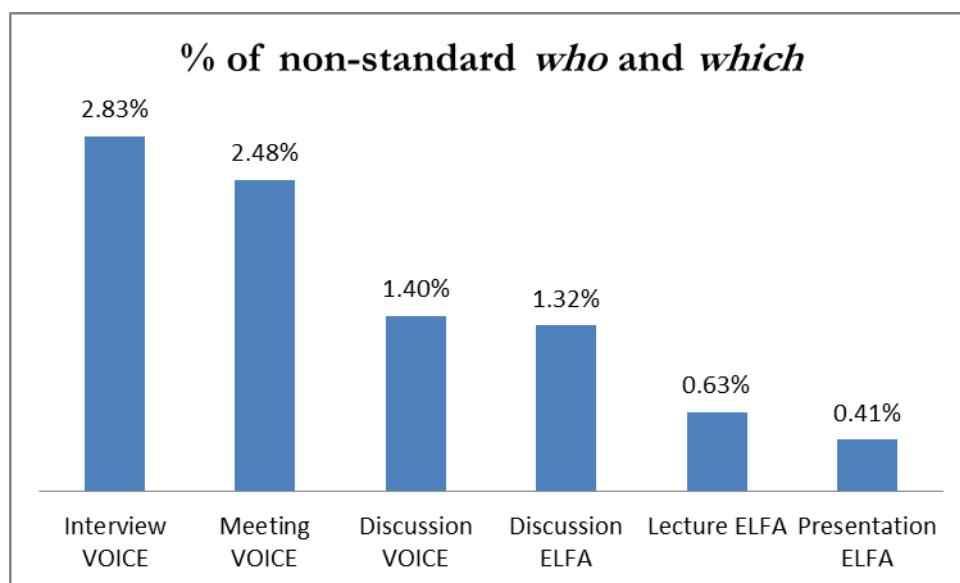


Figure 24. Ranking of percentages of usage of the relative pronouns *who* and *which* (with antecedents that are directly-preceding nouns or clauses that end with nouns) that is non-standard, in event types that contain at least three non-standard uses, in ELF corpora (VOICE and ELFA). Data from Tables 21 and 22.

Although the percentages are all low, there are differences between them. In each corpus, the greatest figure is more than twice the least. However, the most informal<sup>205</sup> event type out of these, Discussion, has the highest percentage in ELFA and the lowest in VOICE. As this is the only event type shared by the corpora, it suggests a continuum, with more non-standard usage occurring in the event types that only appear in VOICE. However, this only seems a possibility when examining *who* and *which*. With the 3<sup>rd</sup> person zero, the ranking does not form a pattern with Discussion in the middle (Figure 23).

Between the two corpora, no event type has a *high* percentage. It seems fair to say that in all event types, a small percentage of forms are 3<sup>rd</sup> person zeroes, and a small percentage of the usage of the relative pronouns *who* and *which* is non-standard, and there is not an ‘event type influence’ on the production of these non-standard features in the ELF data.

The BNC (Spoken components), on the other hand, shows the influence of event types. Dividing the Spoken components into three (Figure 21), the percentage of third person singular present tense forms of lexical verbs and DO that are 3<sup>rd</sup> person zeroes is 9.96% for Interview, 7.83% for Conversation, and 0.69% for other Spoken event types. The 3<sup>rd</sup> person zeroes that give rise to the

<sup>205</sup> ‘Highly formal language involves carefully organized discourse, often with complex syntax and vocabulary, which closely follows the standard language... Highly informal language is very loosely structured, involving a high level of colloquial expression, and often departing from standard norms...’ (Crystal (ed.) 2003: 186).

relatively high percentages occur especially with the verb DO (e.g. *he dunno, she don't, it do*). To check if a dialect is responsible, it was feasible to check the regional spread of the 3<sup>rd</sup> person zeroes for Interview, and the Midlands, South, and North are all covered. (The spread is also true for Interview with DO.) This suggests that the 3<sup>rd</sup> person zero cannot be tied to any single dialect.<sup>206</sup> Extra-BNC, it may be a possible vernacular universal, a non-standard feature hypothetically found ‘in all vernacular varieties of English’ (Kirkpatrick 2012: 132), a feature that ‘appear[s] to be similar in spoken Englishes around the world’ (Ranta 2009: 102). Among the grammatical processes proposed by Chambers as recurring ‘in vernaculars wherever they are spoken’ (Chambers 2004: 128) is ‘leveling of irregular verb forms’ (Chambers 2004: 129). Levelling is ‘the gradual loss of a linguistic distinction, so that forms which were originally contrastive become identical’ (Crystal (ed.) 2003), and the loss of the third person singular present tense *-s* ending can be described as levelling (Mauranen 2012: 32). However, the only way to verify the existence of a vernacular universal is to gather substantial evidence from Inner Circle Englishes.<sup>207</sup> At the present time, the 3<sup>rd</sup> person zero cannot be verified as a vernacular universal.

The investigation of the relative pronouns *who* and *which* in the BNC contrasts with the 3<sup>rd</sup> person zero in the BNC. For event types that contain four or more non-standard uses, the percentages of usage of the relative pronouns *who* and *which* that is non-standard range from 0.19% to 0.55%. This indicates that the Interview and Conversation event types in the BNC do not inherently produce the most non-standard forms, an impression that might have been given by the 3<sup>rd</sup> person zero investigation.

All of LINDSEI is one event type, ‘informal interview’ (LINDSEI handbook 2010: 3), and comparing it with the event types of the other corpora did not add to what was already gleaned from comparing the corpora by percentages of non-standard features (Figures 21 and 22). Certainly, it could be the event type that makes LINDSEI percentages (4.08% in Figure 22; and even as 6.17% in Figure 21) higher than those of ELF corpora. Yet LINDSEI states its data do not ‘qualify as fully natural as they were not produced for real communicative purposes’ (LINDSEI handbook 2010: 6), so it seems counterintuitive that *because of its event type* LINDSEI would produce a higher percentage of non-standard features than the more ‘fully natural’ speech event types of VOICE (the highest ranking percentages of Figures 23 and 24). It seems likely that there is another reason. See the end of section 6.4.2.

---

<sup>206</sup> Some ‘non-standard’ features may be features of spoken English grammar. See section 2.13.

<sup>207</sup> INNER CIRCLE defines where in the world ‘[m]ost people have English as a first language – UK, USA, Caribbean, Canada, Australia, NZ’ (Melchers and Shaw 2011: 8, Figure 2.1).



#### 6.4.2. Domains.

DOMAINS are Domains are ‘cultural or other settings in which different forms of speech may be appropriate’ (Matthews 2007: 111). Data was collected on how the non-standard features appear in the ELF corpora by domain, with the idea of looking for any patterns, or seeing if they are prominent in any domain.

The percentages of forms (of lexical verbs and DO) that are 3<sup>rd</sup> person zeroes in domains of VOICE was discovered to range from 4.35% to 7.27%. When the data is restricted to *he/she/it* + verb, the percentages become lower, 2.69%-6.14%. The *he/she/it* + verb data disguises the overall picture of VOICE, for example the percentage of forms in the Professional research and science domain in is 7.27%, and when the data is restricted, it becomes 2.78%. This great change in percentage occurs with all domains in VOICE, and clouds the differences between them.<sup>208</sup> In any case, no VOICE domain has a *high* percentage, so there does not seem to be any particular domain influencing the production of the non-standard form. ELFA is all in the educational domain, and its percentage of *he/she/it* + zeroes (of lexical verbs and DO) is 2.28% (Figure 21), lower than all VOICE domains.

The percentage of usage of the relative pronouns *who* and *which* that is non-standard in domains of VOICE was found to range from 1.21% to 2.63% (discounting the Leisure domain, which sported no non-standard uses). Although this shows differences between domains, they are all low percentages, with no domain prominent. In the all-educational ELFA, the percentage of usage of the relative pronouns *who* and *which* that is non-standard is 0.95% (Figure 22), lower than all VOICE domains (save Leisure).

There is nothing about the educational domain that could be said to make the percentages low in ELFA – the educational domain does not have the lowest percentages in the other corpora, except in the instance of the BNC with non-standard usage of *who* and *which*.

Not all the data from the BNC could be analysed by domain. The Spoken Demographic component of the BNC (‘demographically sampled’ – see Hoffmann et al. 2008: 32), which is all of the Conversation event type, is not given any domain. Only the Spoken Context-governed component (‘material that was collected in particular settings or contexts’ – see Hoffmann et al. 2008: 33), containing all the other spoken event types, can be divided into domains for analysis.

---

<sup>208</sup> See section 4.2.6, Tables 8 and 9.

The investigation discovered that for both 3<sup>rd</sup> person zeroes and non-standard uses of the relative pronouns *who* and *which*, the percentages are all low, and lower than in the ELF corpora.

LINDSEI is all in the educational domain, but a comparison between it and the educational domains of other corpora does not add to what can already be understood from Figures 21 and 22 – that LINDSEI’s percentages are higher. It could be the domain that makes LINDSEI percentages (4.08% in Figure 22; and even as 6.17% in Figure 21) higher than those of ELF corpora, but it could equally be another, unquantified, contextual factor connected with learners. LINDSEI states that ‘most learner data involve some degree of “unnaturalness” as EFL learners rarely use the target language to “go about their normal business”...’ (LINDSEI handbook 2010: 5), which is a reminder of the sociological difference between EFL learners and users of ELF. On the other hand, each corpus has a slightly different mix of L1s, which could account for the percentage difference between them. LINDSEI is also a mix of higher intermediate and advanced learners (LINDSEI handbook 2010: 10) – perhaps users of ELF count as more proficient? Something else worth considering is that the baseline for all the percentages is a small number of non-standard features, so the apparent difference between the ELF corpora and LINDSEI may not be a meaningful one.

### **6.5. This research in the light of previous studies.**

In Björkman’s ELF study, which consists of an estimated 502,000 words (Björkman 2013: 68), ‘the majority of the morphosyntactic constructions in the material actually conformed to standard forms’ (Björkman 2013: 94). The two features investigated here were also used more often in the standard than non-standard way in ELF.

Breiteneder (2009) claimed that the 3<sup>rd</sup> person zero is a ‘symptomatic’ feature of ELF (Breiteneder 2009: 259). Using a pre-release version of VOICE, 43,000 transcribed words, she found 3<sup>rd</sup> person zeroes to be 16.56% of the third person singular present tense forms (of main verbs)<sup>209</sup> (calculated from Breiteneder 2009: 259). In an earlier study of a corpus of 50,000 words (Breiteneder 2005), she found 20.57% of third person singular present tense forms (of main verbs) to be 3<sup>rd</sup> person zeroes. A study of a corpus of 61,234 words by Dewey (discussed in Cogo and Dewey 2006, and Cogo and Dewey 2012, but not widely available; word count in Carey 2013a) finds 3<sup>rd</sup> person zeroes ‘particularly widespread’, with 51.18% of third person singular present tense forms (of lexical verbs) being 3<sup>rd</sup> person zeroes. The indication of this study is that these earlier studies had datasets that were too small to be reliable. The percentage of third

---

<sup>209</sup> A MAIN VERB is ‘the head of a verb phrase (always a lexical verb)’ (Hasselgård 2012).

person singular present tense forms (of lexical verbs and DO) that are 3<sup>rd</sup> person zeroes in VOICE is 4.92% (Figure 21). This is a far smaller percentage, and the dataset is 1,320,311 words. Similarly in ELFA, the percentage of third person singular present tense forms (of lexical verbs and DO) in constructions of the kind *he/she/it* + verb, is 2.28% (Figure 21). The dataset is 1,037,197 words. This study uses the largest ELF dataset.

The interchange of the relative pronouns *who* and *which* is identified in Dewey's study (discussed in Cogo and Dewey 2012). There is no numerical figure given for the extent of non-standard usage, but Cogo and Dewey observe that with 'collective antecedents', e.g. collective nouns like *community* and *generation* and demonstrative pronouns like *those* (Cogo and Dewey 2012: 74), there is an 'emergent trend... towards a preference for the *which* pronoun' when there is a legitimate grammatical choice between *who* and *which*, i.e. where either could be used in standard English (Cogo and Dewey 2012: 74). My investigation of 'collective antecedents' with *who* and *which* in VOICE, ELFA, the BNC, and LINDSEI, detailed in section 5.5, shows that to a marginal degree the NSs in my data prefer *who* more often than *which*, and to a marginal degree the users of ELF prefer *which* more often than *who*, yet speakers in LINDSEI also have a marginal preference for *which*, which shows a similarity between the use of ELF and learner language in this regard, rather than something special about ELF.

## **6.6. Implications of this research.**

This study diminishes the evidence for the language in ELF events being of itself different to native speech or learner language. The 3<sup>rd</sup> person zero should not be cited as 'a well-documented aspect of ELF interactions' (Cogo and Dewey 2012: 49), or as 'emerging as the default option' (Cogo and Dewey 2006). Kirkpatrick cited Breiteneder (2009) as an example when he wrote: 'that there are shared non-standard forms which are shared by speakers from different language backgrounds is of particular note, as this suggests that the speakers' L1 may not be as influential in the production of morpho-syntactic forms as previously thought' (Kirkpatrick 2012: 132). This study supersedes Breiteneder's data on non-standard forms in this respect, and while the same non-standard features can appear among different L1s in ELF, this study shows that there is some L1 influence in their production, which should not be overlooked.

The two non-standard features investigated appear in the corpora representing ELF, native speech, and learner language. They appear in ELF corpora at a lower rate than that of the learner language corpus, but not by much. The native speech corpus generally has fewer of the two non-standard features, although the 3<sup>rd</sup> person zero appears more often in the native speech corpus

than the ELF corpora in two event types, which hints that what is truly ‘standard’ in native speech (see section 2.13) might be contextually dependent. There was nothing about the investigated context of ELF (event types and domains) that explained why VOICE and ELFA appear slightly more similar to each other than the other corpora, so either there is a context that has not been part of this investigation, or the percentage differences in the occurrence of the non-standard features in the corpora are negligible. Alternatively, it is possible that the investigation of two non-standard features is not enough to paint the desired picture – it was two out of a possible thirteen that were presented in section 2.15.

No investigation of the language in ELF changes anything about the ELF perspective, which is a way at looking at the language, and has, or is having, an effect on the way the language is taught and learned internationally (see sections 2.7 and 2.8). One can imagine that there will continue to be English spoken in, for example, a professional business context, in which the speakers do not consider themselves to be learners, and do not consider native-like speech to be the target for competence.

ELF may have an effect on English over sixty or seventy years, as Mauranen suggests (Mauranen 2012: 33). Global use of English may produce contact-induced change (Mauranen 2012: 27-36), or ELF speakers may accelerate ‘processes that have already been taking place more slowly’ in native speech (Jenkins 2009a: 432), or stable ELF interaction could produce endonormative features (Mauranen 2012: 25; Pitzl 2012: 39; Meierkord 2012: 212, note 6; Schneider 2012: 64). ELF is part of the future of English, and as English becomes global, the Inner Circle countries are unlikely to maintain an exclusive norm-providing role. As a lingua franca, English is likely to come under the control of its users, whoever they are, wherever they may be, and whatever they want to communicate to each other. The two non-standard features investigated in this thesis, however, show users of ELF conforming to the standard more often than not, so perhaps future global English will not be very strange, linguistically, even in seventy years. ELF seems to be primarily a matter of perspective.

## **References.**

- Biber, Douglas, Johansson, Stig, Leech, Geoffrey, Conrad, Susan, and Finegan, Edward. (1999), *Longman Grammar of Spoken and Written English* (Pearson Education Limited; Harlow).
- Björkman, Beyza. (2009), 'From Code to Discourse in Spoken ELF', in Mauranen, Anna and Ranta, Elina (eds.), *English as a Lingua Franca: Studies and Findings* (Cambridge Scholars Publishing; Newcastle-upon-Tyne), 225-251.
- Björkman, Beyza. (2013), *English as an Academic Lingua Franca: An Investigation of Form and Communicative Effectiveness* (De Gruyter Mouton; Berlin).
- Breiteneder, Angelika. (2005), 'The naturalness of English as a European lingua franca: the case of the 'third person -s'', *Vienna English Working Papers* 14/2: 3-26.
- Breiteneder, Angelika. (2009), 'English as a lingua franca in Europe: an empirical perspective', *World Englishes* 28/2: 256-269.
- Britain, David. (2010), 'Grammatical Variation in the Contemporary Spoken English of England', in Kirkpatrick (ed.), (2012), *The Routledge Handbook of World Englishes* (Routledge; London and New York), 37-58.
- British National Corpus (2007), Version 4.0. Interface: the CQP-edition of BNCweb.
- Burnard, Lou (ed.). (2007), Reference Guide for the British National Corpus.  
<<http://www.natcorp.ox.ac.uk/docs/URG/>>. Section 1, Design of the corpus  
<<http://www.natcorp.ox.ac.uk/docs/URG/BNCdes.html>>, and section 9.6, Text and genre classification codes <<http://www.natcorp.ox.ac.uk/docs/URG/codes.html#classcodes>>. Last accessed 6 May 2014.
- Carey, Ray. (2013a), 'In defense of good data: the question of third-person singular -s', ELFA Project Blog, 30 Jun. 2013 <<http://elfaproject.wordpress.com/2013/06/30/in-defense-of-good-data-the-question-of-third-person-singular-s/>> last accessed 13 Dec. 2013.
- Carey, Ray. (2013b), 'In search of wild diversity: a closer look at 3rd-person zero marking in ELF', ELFA Project Blog, 31 Aug. 2013 <<http://elfaproject.wordpress.com/2013/08/31/in-search-of-wild-diversity-3rd-person/>> last accessed 20 Jan. 2014.

Chambers, J. K. (2004), 'Dynamic typology and vernacular universals', in Kortmann, Bernd (ed.), *Dialectology meets Typology: Dialect Grammar from a Cross-Linguistic Perspective* (Mouton de Gruyter; Berlin and New York), 127-145.

CLAWS7. 'Free CLAWS WWW tagger' < <http://ucrel.lancs.ac.uk/claws/trial.html> > last accessed 7 May 2014.

CLAWS7. 'UCREL CLAWS7 Tagset' < <http://ucrel.lancs.ac.uk/claws7tags.html> > last accessed 7 May 2014.

Cogo, Alessia, and Dewey, Martin (2006), 'Efficiency in ELF Communication: From Pragmatic Motives to Lexico-grammatical Innovation', *Nordic Journal of English Studies* 5/2: 59-93.

Cogo, Alessia, and Dewey, Martin. (2012), *Analysing English as a Lingua Franca: A Corpus-driven Investigation* (Continuum; London).

Crystal, David. (2003), *English as a Global Language* (2<sup>nd</sup> edn., Cambridge University Press; Cambridge).

Crystal, David (ed.). (2003), *A Dictionary of Linguistics & Phonetics* (5<sup>th</sup> edn., Blackwell Publishing; Oxford).

Dewey, Martin. (2009), 'English as a Lingua Franca: Heightened Variability and Theoretical Implications', in Mauranen, Anna and Ranta, Elina (eds.), *English as a Lingua Franca: Studies and Findings* (Cambridge Scholars Publishing; Newcastle-upon-Tyne), 60-83.

Dewey, Martin. (2012), 'Towards a *post-normative* approach: learning the pedagogy of ELF', *Journal of English as a Lingua Franca*, 1/1: 141-170.

ELFA (2008), The Corpus of English as a Lingua Franca in Academic Settings. Director: Anna Mauranen. <<http://www.helsinki.fi/elfa/elfacorp>> supplied to me 13 Jun. 2013.

ELFA, Description of the ELFA corpus project  
<<http://www.helsinki.fi/englanti/elfa/elfacorp.html>> last accessed 7 May 2014.

ELFA, First languages represented in the ELFA corpus  
<[http://www.helsinki.fi/englanti/elfa/elfa\\_langs.html](http://www.helsinki.fi/englanti/elfa/elfa_langs.html)> last accessed 7 May 2014.

Firth, Alan and Wagner, Johannes. (1997), 'On Discourse, Communication, and (Some) Fundamental Concepts in SLA Research', *The Modern Language Journal*, 81/3: 285-298.

- Graddol, David. (1997), *The Future of English* (British Council; London).
- Hasselgård, Hilde. (2012), 'Glossary of grammatical terms used in *English Grammar: Theory and Use (2nd edition)*' < <http://folk.uio.no/hhasselg/terms.html>>.
- Hasselgård, Hilde, Lysvåg, Per, and Johansson, Stig. (2012), *English Grammar Theory and Use* (2<sup>nd</sup> edn., Universitetsforlaget; Oslo).
- Hoffmann, Sebastian, Evert, Stefan, Smith, Nicholas, Lee, David, and Berglund Prytz, Ylva. (2008), *Corpus linguistics with BNCweb: a practical guide* (Peter Lang).
- Hülmbauer, Cornelia. (2009), "'We don't take the right way. We just take the way that we think you will understand'" – The Shifting Relationship between Correctness and Effectiveness in ELF', in Mauranen, Anna and Ranta, Elina (eds.), *English as a Lingua Franca: Studies and Findings* (Cambridge Scholars Publishing; Newcastle-upon-Tyne), 323-347.
- Jenkins, Jennifer. (2006), 'Points of view and blind spots: ELF and SLA', *International Journal of Applied Linguistics*, 16/2: 137-162.
- Jenkins, Jennifer. (2009a), *World Englishes: a resource book for students* (2<sup>nd</sup> edn., Routledge; London and New York).
- Jenkins, Jennifer. (2009b), 'English as a lingua franca: interpretations and attitudes', *World Englishes*, 28/2: 200-207.
- Jenkins, Jennifer, Cogo, Alessia, and Dewey, Martin. (2011), 'Review of developments in research into English as a lingua franca', *Language Teaching*, 44/3: 281-315.
- Jenks, Christopher. (2012), 'Doing being reprehensive: Some interactional features of English as a lingua franca in a chat room', *Applied Linguistics*, 33/4: 386-405.
- Kirkpatrick, Andy. (2012), 'English as an Asian Lingua Franca: the "Lingua Franca Approach" and implications for language educations policy', *Journal of English as a Lingua Franca*, 1/1: 121-139.
- Knapp, Karlfried. (2002), 'The fading out of the non-native speaker. Native speaker dominance in lingua-franca-situations', in Knapp, Karlfried and Meierkord, Christiane (eds.), *Lingua Franca Communication* (Peter Lang; Frankfurt), 217-244.

- LINDSEI (2010), Louvain International Database of Spoken English Interlanguage. Project director: Sylviane Granger.
- LINDSEI handbook (2010), Gilquin, Gaëtanelle, De Cock, Sylvie, Granger, Sylviane (eds.) (Presses Universitaires de Louvain).
- Lowenberg, Peter H. (2002), 'Assessing English Proficiency in the Expanding Circle', *World Englishes*, 21/3: 431-435.
- Matthews, P. H. (2007), *Oxford Concise Dictionary of Linguistics* (2<sup>nd</sup> edn., Oxford University Press; Oxford).
- Mauranen, Anna. (2012), *Exploring ELF: Academic English Shaped by Non-Native Speakers* (Cambridge Applied Linguistics; Cambridge).
- Meierkord, Christiane. (2012), *Interactions across Englishes* (Cambridge University Press; Cambridge).
- Melchers, Gunnel, and Shaw, Philip. (2011), *World Englishes* (2<sup>nd</sup> edn., Hodder Education).
- Mortensen, Janus. (2013), 'Notes on English used as a lingua franca as an object of study', *Journal of English as a Lingua Franca*, 2/1: 25-46.
- Ortega, Lourdes. (2009), *Understanding Second Language Acquisition* (Hodder Education).
- The Concise Oxford English Dictionary*. (1995), (9<sup>th</sup> edn., Oxford University Press; Oxford).
- Pitzl, Marie-Luise. (2012), 'Creativity meets convention: idiom variation and re-metaphorization in ELF', *Journal of English as a Lingua Franca*, 1/1: 27-55.
- Prodromou, Luke. (2008), *English as a Lingua Franca: A Corpus-based Analysis* (Continuum; London).
- Quirk, Randolph, Greenbaum, Sidney, Leech, Geoffrey, Svartvik, Jan. (1985), *A Comprehensive Grammar of the English Language* (Longman; London and New York).
- Ranta, Elina. (2009), 'Syntactic features in spoken ELF – learner language or spoken grammar?', in Mauranen, Anna and Ranta, Elina (eds.), *English as a Lingua Franca: Studies and Findings* (Cambridge Scholars Publishing; Newcastle-upon-Tyne), 84-106.



Schneider, Edgar W. (2012), 'Exploring the interface between World Englishes and Second Language Acquisition – and implications for English as a Lingua Franca', *Journal of English as a Lingua Franca*, 1/1: 57-91.

Seidlhofer, Barbara. (2004), 'Research perspectives on teaching English as a lingua franca', *Annual Review of Applied Linguistics*, 24/1: 209-239.

Seidlhofer, Barbara. (2009a), 'Common ground and different realities: world Englishes and English as a lingua franca', *World Englishes*, 28/2: 236–245.

Seidlhofer, Barbara. (2009b), 'Orientations in ELF Research', in Mauranen, Anna and Ranta, Elina (eds.), *English as a Lingua Franca: Studies and Findings* (Cambridge Scholars Publishing; Newcastle-upon-Tyne), 37-59.

Seidlhofer, Barbara. (2011), *Understanding English as a Lingua Franca* (Oxford University Press; Oxford).

Trask, R. L. (2000), *Dictionary of English Grammar* (Penguin Books).

VOICE (tagged) (2013), The Vienna-Oxford International Corpus of English (version POS XML 2.0). Director: Barbara Seidlhofer; Researchers: Stefan Majewski, Ruth Osimk-Teasdale, Marie-Luise Pitzl, Michael Radeka, Nora Dorn.

VOICE (untagged) (2013), The Vienna-Oxford International Corpus of English (version 2.0 XML). Director: Barbara Seidlhofer; Researchers: Angelika Breiteneder, Theresa Klimpfinger, Stefan Majewski, Ruth Osimk-Teasdale, Marie-Luise Pitzl, Michael Radeka.

VOICE Corpus Information page < [http://www.univie.ac.at/voice/page/corpus\\_information](http://www.univie.ac.at/voice/page/corpus_information) > last accessed 7 May 2014.

VOICE Frequently Asked Questions page <<http://www.univie.ac.at/voice/page/faq>> last accessed 13 Dec. 2013.

VOICE, Statistics VOICE 2.0 Online. 1 Total numbers  
<[http://www.univie.ac.at/voice/stats/voice20\\_overall](http://www.univie.ac.at/voice/stats/voice20_overall)>, 2 First languages  
<[http://www.univie.ac.at/voice/stats/voice20\\_languages](http://www.univie.ac.at/voice/stats/voice20_languages)>, and 4 Domains and Speech event  
types <[http://www.univie.ac.at/voice/stats/voice20\\_domains\\_spets](http://www.univie.ac.at/voice/stats/voice20_domains_spets)>, last accessed 7 May 2014.

WordSmith (1996) (Lexical Analysis Software Ltd. and Oxford University Press.) WordSmith 6 for PC Windows 2000 or later.

Yule, George. (1990), 'Interactive conflict resolution in English', *World Englishes*, 9/1: 53-62.

Zheng, Yongyan. (2013), 'An inquiry into Chinese learners' English-learning motivational self-images: ENL learner or ELF user?', *Journal of English as a Lingua Franca*, 2/2: 341-364.